

A.T. Kearney, Inc.  
222 West Adams Street  
Chicago, Illinois 60606  
312 648 0111  
Facsimile 312 223 6200

Management  
Consultants

RECEIVED AT KEARNEY

MAR 9 - 1993

OFFICE OF RCRA  
Waste Management Division  
U.S. EPA, REGION V

March 9, 1993

Mr. Bernie Orenstein  
Regional Project Officer  
U.S. Environmental Protection Agency  
Region V, HRM7J  
77 W. Jackson Boulevard  
Chicago, IL 60604

Reference: EPA Contract No. 68-W9-0040; Work Assignment No. R05-25-02; American Steel Foundry (ASF) Production Facility and ASF Disposal Facility, Alliance, Ohio; EPA I.D. Nos. OHD981090418 and OHD017497587, respectively; Preliminary Assessment/Visual Site Inspection; Final Deliverable

Dear Mr. Orenstein:

Enclosed please find the Preliminary Assessment/Visual Site Inspection (PA/VSI) report for the above-referenced facilities. The report presents the results of the Preliminary Assessment (PA) and Visual Site Inspection (VSI) for the facilities.

The American Steel Foundries (ASF) facilities consist of a production facility operating under EPA I.D. Number OHD981090418 and a non-contiguous disposal facility operating under EPA I.D. Number OHD017497587. The production facility consists of a green sand steel foundry, which primarily provides steel parts for the railroad industry. The foundry began operation in the 1890s and has been owned by ASF since 1902. The ASF Disposal Facility (SWMU 1) is a landfill formerly operated as a coal strip mine. Several wastes generated at the foundry have been disposed at the ASF Disposal Facility, including electric arc furnace (EAF) dust, which is a hazardous waste due to levels of cadmium (D006) and lead (D008) in the dust.

Mr. Bernie Orenstein

March 9, 1993

Page 2

A total of 15 Solid Waste Management Units (SWMUs) and one Area of Concern (AOC) were observed during the VSI. On December 10, 1992, ASF entered into a Consent Decree with U.S. EPA regarding past waste management practices and RCRA closures of the ASF Disposal Facility (SWMU 1) and the EAF Baghouse and Roll-off Box (SWMU 8). At the time of the VSI, ASF was negotiating a Consent Order with the Ohio Attorney General regarding RCRA closures and past waste management at the Former East Solid Waste Storage Area (SWMU 14) and the Former Used Oil Storage Area (SWMU 15), as well as the area underlying the Baghouse Waste Storage Area (SWMU 11). Rather than further action under Corrective Action authorities, A.T. Kearney suggests that EPA closely monitor closure activities at these units so that potential releases are adequately addressed.

All other units discovered during the VSI require no further action, with the exception of the Underground Storage Tanks (AOC A), where a recently discovered tank has yet to be characterized or removed. A.T. Kearney suggests that EPA monitor tank closure activities to determine if hazardous constituents have been released.

Should you have any questions or require additional information, please feel free to contact me or Jeff Surfus, the A.T. Kearney WAM, who can be reached at (313) 426-1984.

Sincerely,



Robert Young  
Technical Director

Enclosure

cc: T. Matheson, EPA Region V  
B. Jordan  
L. Poe  
J. Surfus  
A. Anderson (w/o enc)  
T. Lavender-Gates (w/o enc)

PRELIMINARY ASSESSMENT/VISUAL SITE INSPECTION

of the

American Steel Foundry Production and Disposal Facilities  
Alliance, Ohio  
EPA I.D. Nos. OHD981090418 and OHD017497587

Prepared for:

Mr. Bernie Orenstein  
U.S. Environmental Protection Agency  
Region V  
77 W. Jackson Boulevard  
Chicago, Illinois 60604

Prepared by:

A.T. Kearney, Inc.  
222 West Adams Street  
Chicago, IL 60606

EPA Contract No. 68-W9-0040  
Work Assignment No. R05-25-02

March 1993

## TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
EXECUTIVE SUMMARY . . . . .	i
1.0 INTRODUCTION . . . . .	1-1
2.0 FACILITY DESCRIPTION . . . . .	2-1
2.1 FACILITY LOCATION . . . . .	2-1
2.2 FACILITY OPERATIONS . . . . .	2-1
2.3 RELEASE HISTORY . . . . .	2-6
2.4 REGULATORY HISTORY . . . . .	2-9
2.5 ENVIRONMENTAL SETTING . . . . .	2-17
2.5.1 Climate . . . . .	2-17
2.5.2 Area Soils and Surface Waters . . . . .	2-17
2.5.3 Geology and Hydrogeology . . . . .	2-18
2.6 RECEPTORS . . . . .	2-20
3.0 SOLID WASTE MANAGEMENT UNITS . . . . .	3-1
4.0 AREAS OF CONCERN . . . . .	4-1
5.0 CONCLUSIONS AND RECOMMENDATIONS . . . . .	5-1
6.0 REFERENCES . . . . .	6-1

### Attachments

- A VISUAL SITE INSPECTION SUMMARY AND PHOTOGRAPHIC LOG
- B VISUAL SITE INSPECTION FIELD NOTES
- C CORRECTIVE ACTION STABILIZATION QUESTIONNAIRE
- D RESULTS OF ASF DISPOSAL FACILITY INVESTIGATIONS



## LIST OF TABLES

<u>Table</u>		<u>Page</u>
2-1	SOLID WASTE MANAGEMENT UNITS AND AREA OF CONCERN (AOC) . . . . .	2-7
5-1	SWMUs, AOC, AND SUGGESTED FURTHER ACTIONS . . . . .	5-7

## LIST OF FIGURES

<u>Figure</u>		<u>Page</u>
2-1	GENERAL LOCATION OF AMERICAN STEEL FOUNDRIES . . . . .	2-2
2-2	LOCATIONS OF SWMUS AND AOCS . . . . .	2-8
4-1	WASTEWATER TREATMENT SYSTEM (SWMU 1) FLOW DIAGRAM . . . . .	3-11

## EXECUTIVE SUMMARY

A Preliminary Assessment/Visual Site Inspection (PA/VSI) was conducted at American Steel Foundries (ASF) production and disposal facilities (EPA I.D. Nos. OHD981090418 and OHD017497587, respectively). The purpose of the PA/VSI was to assess the potential for releases from Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs) at the facility. This PA/VSI Report summarizes the findings of the review of the available file materials and the Visual Site Inspection (VSI), which was conducted on January 13 and 14, 1993. In addition, a completed Corrective Action Stabilization Questionnaire is included as Attachment C to assist in the prioritization of RCRA facilities.

American Steel Foundries (ASF) operates a green sand steel foundry, which primarily provides steel parts for the railroad industry. The foundry began operation in the 1890s and has been owned by ASF since 1902.

Fifteen SWMUs and one AOC were identified during the PA/VSI. These are listed as follows:

### Solid Waste

#### Management Units

#### Name

- |    |                                      |
|----|--------------------------------------|
| 1  | ASF Disposal Facility                |
| 2  | Baghouses                            |
| 3  | Satellite Accumulation Areas (3)     |
| 4  | Parts Cleaners (8)                   |
| 5  | Spray Booth Filter Systems (2)       |
| 6  | Paint Waste and Wood Roll-off Box    |
| 7  | Container Storage Area               |
| 8  | EAF Baghouse and Roll-off Box        |
| 9  | Wastewater Treatment System          |
| 10 | Stormwater Sewer System              |
| 11 | Baghouse Waste Storage Area          |
| 12 | Barium Dust Storage Area             |
| 13 | Refuse Dumpsters                     |
| 14 | Former East Solid Waste Storage Area |
| 15 | Former Used Oil Storage Area         |

### Areas of Concern

- |   |                           |
|---|---------------------------|
| A | Underground Storage Tanks |
|---|---------------------------|

Of the 15 SWMUs and one AOC listed, all but two are currently active and operating at the facility. The Former East Solid Waste Storage Area (SWMU 14) and the Former Used Oil Storage Area (SWMU 15) are no longer in operation.

## 1.0 INTRODUCTION

Preliminary Assessment/Visual Site Inspections (PA/VSI) are being performed at several RCRA facilities in Region V as part of the United States Environmental Protection Agency's (EPA's) Environmental Priorities Initiative. Through the initiative, EPA Region V is prioritizing RCRA facilities for future corrective action. The PA/VSI is the first step in the process of prioritizing these facilities for corrective action. Through the PA/VSI process, sufficient information is obtained to characterize a facility's actual or potential releases to the environment from Solid Waste Management Units (SWMUs) and Areas of Concern (AOCs).

This report presents the results of the PA/VSI for the American Steel Foundry (ASF) facilities in Alliance, Ohio. The facilities consist of a production facility operating under EPA I.D. No. OHD981090418 and a non-contiguous disposal facility operating under EPA I.D. No. OHD017497587. The information used in preparing this report was compiled from State of Ohio Environmental Protection Agency (OEPA) files, EPA Region V files, and information gathered during the VSI. Facility representatives were also contacted after the VSI to clarify site information.

The purposes of the PA are to:

- o Identify SWMUs and AOCs at the facility.
- o Obtain information on the operational history of the facility.
- o Obtain information on releases from any units at the facility.
- o Identify data gaps and other informational needs to be filled during the VSI.

The purposes of the VSI are to:

- o Identify SWMUs and AOCs not found during the PA.
- o Identify releases not discovered during the PA.
- o Provide a more specific description of the environmental setting.

- o Provide more information on release pathways and the potential for releases to each media.
- o Confirm operations, SWMUs, AOCs, and release information obtained during the PA.

The VSI included interviewing appropriate facility staff, inspecting the entire facility to identify all SWMUs and AOCs, photographing all SWMUs, identifying evidence of releases, initially identifying potential sampling locations, and obtaining all information necessary to complete the VSI report. A Corrective Action Stabilization Questionnaire was completed after the VSI. The questionnaire indicates that stabilization does not appear warranted for the ASF facility.

The VSI was conducted on January 13 and 14, 1993. A total of 15 SWMUs and one AOC were identified during the VSI.

An Introduction to the report is provided in Section 1.0. Section 2.0 provides a description of the facility which includes the facility location, operations, release history, regulatory history, environmental setting and receptors. Sections 3.0 and 4.0 of the report provide a summary of the information available for each SWMU and AOC, including observations made during the VSI. References used to prepare this report are included in Section 6.0. Attachment A is a summary of the VSI and the VSI Photographic Log. The VSI Field Notes are presented in Attachment B. Attachment C includes a Corrective Action Stabilization Questionnaire, which was completed after the VSI. Attachment D presents the results of ASF Disposal Facility investigations.

## **2.0 FACILITY DESCRIPTION**

This section describes the facility location, past and present operations, waste streams, waste management practices, release history, regulatory history, environmental setting, and potential receptors.

### **2.1 FACILITY LOCATION**

The American Steel Foundries (ASF) facility is located at 1001 East Broadway in Alliance, Mahoning County, Ohio. The ASF Disposal Facility (SWMU 1) is located on Lake Park Road in Mahoning County, Ohio. The coordinates are 40°55'0" North and 81°2'30" West (Ref. 49). Figure 2-1 shows the locations of both the plant and the disposal facility. ASF is a division of Amsted Industries, Inc., located in Chicago, Illinois. The 25-acre facility is located in an industrial area and is bounded on the north by railyards, to the east generally by a residential area, to the west and south by neighboring facilities. The 14-acre ASF disposal facility is located in a rural area, approximately 2.5 miles east of the ASF plant. There is a mobile home park located immediately to the east of the ASF disposal facility and to the south and west of the disposal site is an abandoned landfill formerly operated by the City of Sebring, Ohio (Refs. 56 and 121).

### **2.2 FACILITY OPERATIONS**

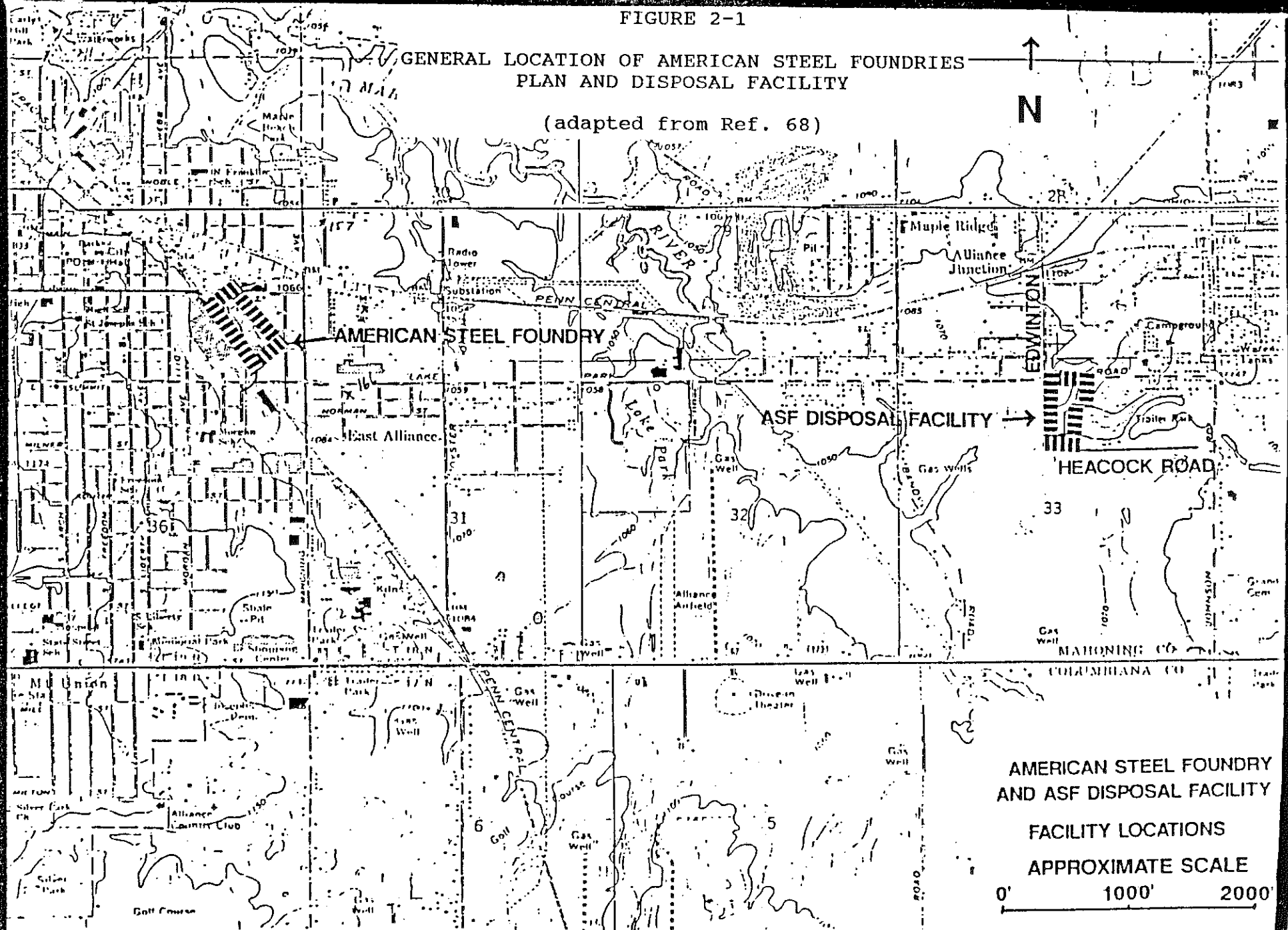
The facility has operated as a foundry at this location since the 1890's. ASF purchased the facility in 1902 and has been operating the facility since that time. The original plot was 20 acres and has since been enlarged. The ASF Disposal Facility (SWMU 1) was purchased in 1966. The site was formerly used as a coal strip mine. The original plot was 12 acres. An additional two acres was purchased for use as a buffer zone around the site (Ref. 121).

The manufacturing facility has always operated as a green sand (greenish black silica sand) foundry. The facility's Standard Industrial Classification (SIC) code is 3325. ASF manufactures steel products primarily for the railroad industries, including couplers, frames, and other steel parts. Low carbon, low alloy steel is obtained from scrap suppliers as a raw material. The steel is melted in an electric arc furnace generating electric arc furnace (EAF) dust, which is TCLP hazardous waste due to levels of lead (D008) and cadmium (D006) (Ref. 68). The dust is

FIGURE 2-1

GENERAL LOCATION OF AMERICAN STEEL FOUNDRIES  
PLAN AND DISPOSAL FACILITY

(adapted from Ref. 68)



AMERICAN STEEL FOUNDRY  
AND ASF DISPOSAL FACILITY

FACILITY LOCATIONS

APPROXIMATE SCALE

0' 1000' 2000'

managed by the EAF Baghouse and Roll-off Box (SMWU 8). A water/sugar (glutrin) mixture is added to the waste in the roll-off box as a dust control measure. The waste is then removed offsite and treated at Envirite Corporation in Canton, Ohio (Ref. 121).

The molten steel is poured into molds made primarily of green silica sand (actually more black in appearance). A binding agent, phenolic resin, is added to the sand mixture, to help hold the molds together. Some fine chromite sand is used for better surface finishes of products. In the process of making the sand molds, a fine sand/water mixture is sprayed onto the molds in one of two spray booths. The Spray Booth Filter System (SWMU 5) filters are taken to the American Waste Landfill in Canton, Ohio. After the molds are baked, the molten steel is poured into the molds (Ref. 121).

After the steel has solidified, the sand is shaken away from the steel, leaving the steel product. The sand is then routed to the sand washer where impurities are washed out of the sand. Reportedly, 90 percent of the sand used at ASF is recycled. The wastewater from the sand washing process is then routed to the Wastewater Treatment System (SWMU 9). The wastewater treatment system consists of a clarifier, a chlorine dioxide treatment unit, two sludge holding tanks, and a filter press. The clarifier is a 100,000-gallon in-ground tank which promotes settling out of solids from the wastewater. Alum and polymer are added to the wastewater to stimulate separation. The water is then either reused in the sand washer or treated with chlorine dioxide to reduce phenol concentrations (from the binding resin) and discharged to the City of Alliance POTW. The solid portion from the clarifier is routed to two 3000-gallon sludge holding tanks prior to dewatering in the filter press. From the filter press, the sludge is pumped into 6-cubic yard rolloff boxes and then trucked to the ASF Disposal Facility (SWMU 1) (Ref. 121).

After separation from the sand, the steel product goes through several cleaning and finishing processes. Heat treating takes place either by normalizing (heating to 1600° F and air cooling), normalizing and tempering (reheating to 700 to 1100° F), or quenching (adding water) and tempering. Shot blast cleaning is a process in which shot is blasted against the product, similar to sand blasting. Projections are removed with a chipping hammer. Some grinding is also done for certain products. Limited assembly is done based on the type of product being manufactured (Ref. 121).



Associated with cleaning and finishing processes are numerous Baghouses (SWMU 2) located throughout the facility. These units manage waste sand, shot blast, metal fines, etc. generated during the above-described processes. When bags (generally fiberglass or plastic) have been filled, they are stored at the Baghouse Waste Storage Area (SWMU 11) prior to being removed offsite and disposed at either the American Waste Landfill in Canton, Ohio or the BFI Willow Creek Landfill, in Alliance, Ohio. In addition, some of the sand fines have historically been disposed at the ASF Disposal Facility (SWMU 1) (Ref. 121). The Baghouse Waste Storage Area is located in an area where waste paint solids were observed being stored on the ground during a June 1989 OEPA inspection. ASF is currently negotiating with the State of Ohio regarding a Consent Order directing ASF to conduct RCRA closure of the area in association with closure of the Former East Solid Waste Storage Area (SWMU 14) (Refs. 70, 103, and 121).

Some products are painted black in a second spray booth. The Spray Booth Filter System (SWMU 5) filters from this process are placed in the Paint Waste and Wood Roll-off Box (SWMU 6). The waste is then removed by BFI and taken to the Willow Creek Landfill in Alliance. ASF indicated that the waste paint is water-based and that analytical data indicates that the material is non-hazardous. This is supported by data provided by the facility. Historical paint wastes may have been hazardous in nature, based on analytical data from disposed paint at the Former East Solid Waste Storage Area (SWMU 14) (Refs. 72 and 121).

A wire feed welding process for certain products generates a hazardous barium dust, which accumulates in a "smoke eater" device and is managed in the Barium Dust Storage Area (SWMU 12). This area is a less than 90-day accumulation area consisting of a covered 55-gallon drum. The waste is removed from the storage area to the EAF Roll-off Box (SWMU 8) prior to removal offsite (Ref. 121).

Three Satellite Accumulation Areas (SWMU 3) are located at the Maintenance Garage, the Building and Equipment (B & E) maintenance department, and the Powerhouse. These units primarily manage waste oils and water-based wastes (ethylene glycol, synthetic oils, etc.). Each unit consists of two 55-gallon drums contained in polypropylene overpacks. Wastes from these units are taken to the Container Storage Area (SWMU 7) (Ref. 121).

There are approximately eight Parts Cleaners (SWMU 4), which are petroleum solvent-based containers of various sizes serviced by Safety-Kleen. These units are located throughout the manufacturing plant and are used for cleaning of various metal equipment (Ref. 121).

The Container Storage Area (SWMU 7) is a less than 90-day indoor storage area for liquid and solid wastes generated at the facility. The majority of the materials stored at the unit are non-hazardous wastes including used motor oil, coolants, soil cuttings and oil/water mixtures. In addition, some hazardous wastes are stored at the unit, including Safety Kleen solvent (Ref. 121).

The ASF Disposal Facility (SWMU 1) is a landfill, formerly operated as a coal strip mine, which has been used as a disposal facility by ASF since 1966. The unit has been used for the disposal of EAF baghouse dust, a characteristic hazardous waste, from 1966 until 1987. The baghouse dust was mixed with clarifier sludge prior to disposal at the landfill. Other materials disposed at the unit include spent foundry sand from baghouses, clarifier sludge, furnace and ladle slag, and spent refractories. ASF has entered into a consent order with the U.S. EPA and OEPA to close the unit as a landfill. Currently, wastes are being stockpiled at the unit until closure can be enacted (Refs. 102, 111 and 121).

The Stormwater Sewer System (SWMU 10) manages surface runoff from the exterior portions of the plant. There are three discharge points located at the foundry. ASF is currently seeking a stormwater discharge permit from OEPA (Refs. 121 and 123).

Refuse Dumpsters (SWMU 13) are located throughout the plant property. They manage various solid wastes and refuse, including spent fiberfax, trash, floor sweepings, cardboard, plastic from shell sand containers, sawdust, paint waste, scrap wood, office paper, receiving/packaging material, scrap urethane, and broken grinding wheels. The wastes are taken to the BFI Willow Creek Landfill in Alliance, Ohio (Refs. 111, 112, 113, 114, 116, 117, 118, and 121).

The Former East Solid Waste Storage Area (SWMU 14) and the Former Used Oil Storage Area (SWMU 15) were identified during a June 1989 inspection by OEPA personnel. The Former East Solid Waste Storage Area is a former above-ground disposal area for foundry sand, spent and unspent cores, paint filters, paint sludge, and

containers. Two drums containing paint wastes were also observed and sampled. The contents were determined to be hazardous due to the characteristic of ignitability (D001). The Former Used Oil Storage Area was observed storing approximately 70 used oil drums on the ground. A composite of these drums was collected and determined to contain chlorinated and non-chlorinated solvents in excess of 3,000 ppm. ASF is currently negotiating with the State of Ohio regarding a Consent Order directing ASF to conduct RCRA closure of the units (Refs. 70, 72, 76, 103, and 121).

Seven Underground Storage Tanks (USTs) (AOC A) have existed at the ASF facility. Currently, one UST is operational and used to store isopropyl alcohol. Three USTs have been closed in place and two USTs have been removed. One tank which was removed, known as Tank #4, was found to have released to the soil. This tank, a 1,480-gallon steel UST containing a mixture of kerosene and fatty acid, was located near the foundry wing building. A field investigation was conducted by R.E. Warner and Associates to determine the extent of the release. Total petroleum hydrocarbons were found in soil in the vicinity of the former tank at levels up to 7,400 ppm. ASF determined that the groundwater had not been impacted by the release (Refs. 101 and 121). A more detailed description of sampling associated with each tank is provided in Section 4.0.

Table 2-1 lists SWMUs and AOCs identified during the PA/VSI and their regulatory status. Figure 2-2 indicates the locations of the SWMUs and AOCs, with the exception of the ASF Disposal Facility (SWMU 1), which is indicated on Figure 2-1. The numbers and letters correspond with SWMU numbers and AOC letters listed on Table 2-1.

### 2.3 RELEASE HISTORY

The ASF Disposal Facility (SWMU 1) was used routinely for the disposal of EAF baghouse dust, a characteristic hazardous waste [(D006) and (D008)], from 1966 until 1987. The baghouse dust was mixed with clarifier sludge prior to disposal at the landfill. Other materials disposed at the unit include spent foundry sand from baghouses, clarifier sludge, furnace and ladle slag, and spent refractories (Refs. 111 and 121).

In the late 1970's, a well at the adjacent mobile home park was reportedly shut down due to elevated fluoride levels. Fluoride is apparently a common contaminant of foundry sands. No action

TABLE 2-1  
SOLID WASTE MANAGEMENT UNITS AND  
AREA OF CONCERN  
AMERICAN STEEL FOUNDRIES  
ALLIANCE, OHIO

<u>SWMU Number</u>	<u>SWMU Name</u>	<u>RCRA*</u> <u>REGULATED</u>	<u>STATUS**</u>
1	ASF Disposal Facility	Y	A
2	Baghouses	N	A
3	Satellite Accumulation Areas (3)	N	A
4	Parts Cleaners (8)	N	A
5	Spray Booth Filter Systems (2)	N	A
6	Paint Waste and Wood Roll-off Box	N	A
7	Container Storage Area	N	A
8	EAF Baghouse and Roll- off Box	N	A
9	Wastewater Treatment System	N	A
10	Stormwater Sewer System	N	A
11	Baghouse Waste Storage Area	Y	A
12	Barium Dust Storage Area	N	A
13	Refuse Dumpsters	N	A
14	Former East Solid Waste Storage Area	Y	I
15	Former Used Oil Storage Area	Y	I

<u>AOC</u>	<u>AOC Name</u>		
A	Underground Storage Tanks	N	A and I

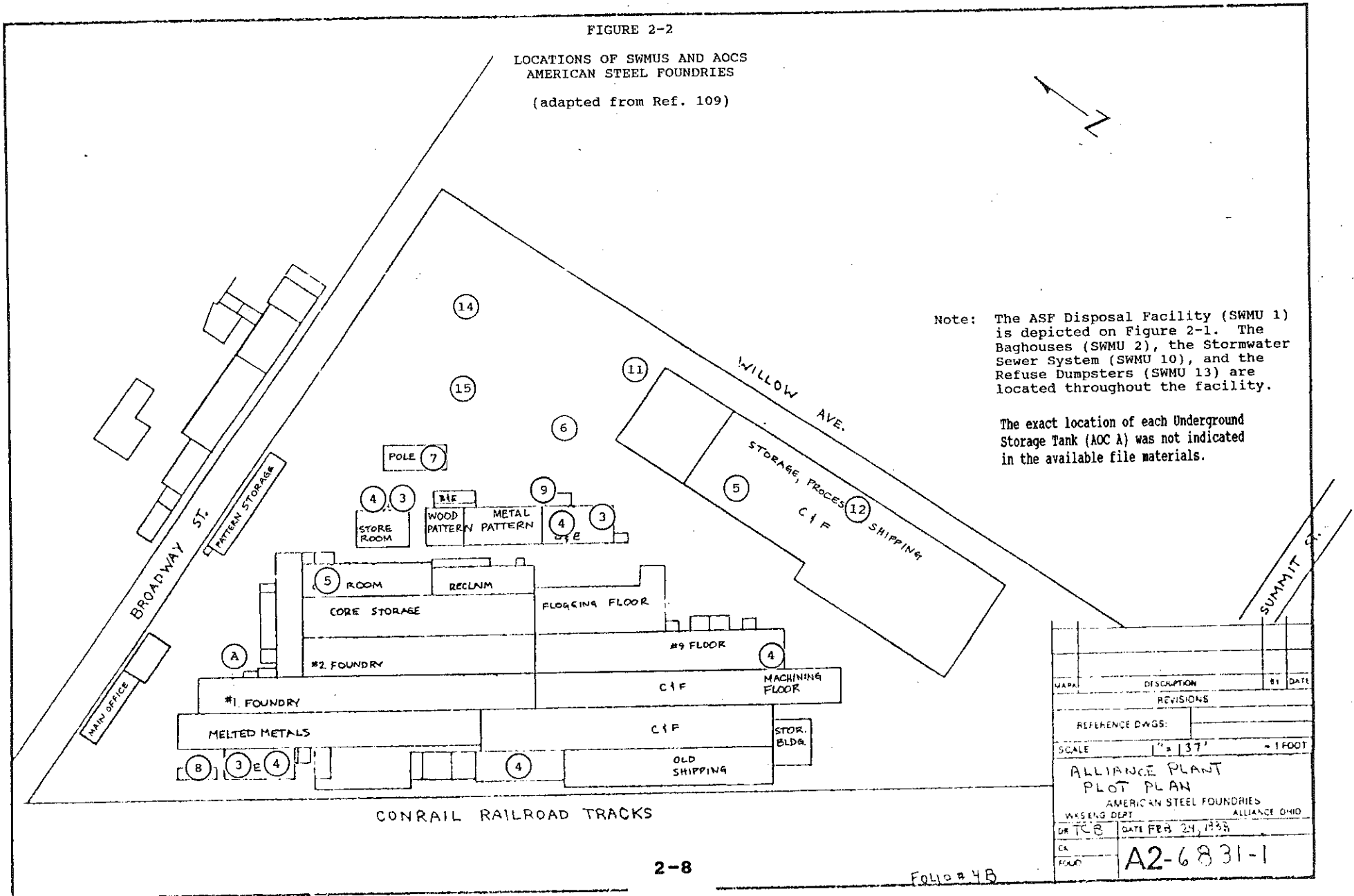
\* For the purposes of this table, a unit is RCRA regulated if it is undergoing closure as a result of a Consent Decree or Consent Order.

\*\* A = Active  
I = Inactive

FIGURE 2-2

LOCATIONS OF SWMUS AND AOCs  
AMERICAN STEEL FOUNDRIES

(adapted from Ref. 109)



Note: The ASF Disposal Facility (SWMU 1) is depicted on Figure 2-1. The Baghouses (SWMU 2), the Stormwater Sewer System (SWMU 10), and the Refuse Dumpsters (SWMU 13) are located throughout the facility.

The exact location of each Underground Storage Tank (AOC A) was not indicated in the available file materials.

WAPA	DESCRIPTION	81	DATE
REVISIONS			
REFERENCE DWGS:			
SCALE 1" = 37' - 1 FOOT			
ALLIANCE PLANT PLOT PLAN AMERICAN STEEL FOUNDRIES WELDING DEPT. ALLIANCE OHIO			
DATE FEB 24, 1988			
CA	A2-6831-1		

was apparently taken to attribute this contamination to the ASF Disposal Facility (SWMU 1) (Ref. 45).

In 1985, an ASF consultant (Bowser Morner Inc.) conducted an environmental assessment of the unit. Surface water samples were collected from the on-site pond, the creek upstream and downstream of the unit, the adjacent Sebring dump site pond, and the adjacent Tecumseh Trailer Court pond. Five soil borings were drilled at the unit. Four of these borings were converted to monitoring wells and were sampled in July, August, and September 1985, August 1986, and September 1987. MW-1 was located northeast of the unit and was determined to be the background well. MW-2 through MW-4 were located along the western perimeter of the unit, between the unit and the former Sebring dump. The fifth boring was drilled into the emplaced waste material. ASF's findings indicated that the emplaced waste was below EP toxic levels. Certain parameters (COD, sulfate, conductivity, total kjeldahl nitrogen, total dissolved solids, and lead) were higher in MW-2 and MW-3 compared to the background MW-1. Lead levels ranged from 0.02 milligrams per liter (mg/l) to 0.13 mg/l. ASF attributed the elevated lead level to the adjacent Sebring dump. Surface waters did not appear to be affected; the highest lead levels were 0.06 mg/l and highest cadmium levels were 0.006 mg/l (Ref. 49). The groundwater results of this investigation, including sample locations and analytical data, are included in Attachment D.

## **2.4 REGULATORY HISTORY**

The following is a chronological description of the regulatory history of the ASF foundry and disposal facilities, taken from available file materials and discussions with facility personnel. Hazardous waste, water, and air permitting issues are discussed.

On July 21, 1967, ASF notified the Mahoning County General Health District that they had purchased the property now known as the ASF Disposal Facility (SWMU 1). At that time they requested permission to dispose of industrial wastes in the former strip mine (Ref. 3). The county health commissioner notified ASF of his approval of the use of the unit as a disposal site on August 7, 1967 (Ref. 4).

The file materials contain eight sanitary landfill inspection forms for Mahoning County Health District inspections of the ASF Disposal Facility (SWMU 1) that occurred on:

- o December 16, 1971 (Ref. 6);
- o February 3, 1972 - metal, pipe, paper, tires, and drums were observed (Ref. 7);
- o March 20, 1974 (Ref. 10);
- o April 24, 1974 (Ref. 11);
- o August 26, 1974 (Ref. 12);
- o November 18, 1974 - general refuse was observed (Ref. 13);
- o March 5, 1975 (Ref. 14); and
- o April 4, 1975 - household and food wastes mixed in with slag were observed (Ref. 15).

On September 26, 1972, the Water Pollution Control Board issued a Findings and Orders letter to ASF regarding discharge of pollutants from the manufacturing facility to the Mahoning River in excess of applicable water quality standards (in violation of Permit 1252.18). The Board required ASF to either connect with the city sanitary sewerage system or submit plans for proposed wastewater treatment facilities as required to meet applicable water quality standards (Ref. 8). ASF continued to discharge to the Mahoning River until February 1979, when it began discharging to the City of Alliance sanitary sewer system. ASF withdrew its request for an NPDES permit at that time (Ref. 19).

In March 1979, OEPA requested that ASF submit operational plans and a permit to install for the ASF Disposal Facility (SWMU 1), since OEPA had determined that the wastes being disposed were considered a solid waste by regulatory definition (Ref. 20). ASF responded on April 5, 1979 that their interpretation of the regulations was that the disposed materials were not considered solid wastes since foundry sand and slag were specifically excluded and the remaining materials were "not harmful or inimical to public health" (Ref. 21). OEPA subsequently requested leachate test data to determine whether the wastes would be harmful to public health (Ref. 22). On July 6, 1979, ASF denied the request to submit leachate data, questioning the applicability of the extraction procedure set forth in the proposed leachate tests. ASF requested a hearing on this matter (Ref. 23). The request for hearing was denied in June 1980 because ASF's request for a hearing was based on their contention that OEPA was intending to force them to obtain a solid waste disposal license, a contention which OEPA denied and the chief hearing examiner agreed (Ref. 27).

On July 31, 1979, OEPA conducted a sampling inspection of the ASF Disposal Facility (SWMU 1). The inspection was conducted without

any notice or request for access to the property. Samples were obtained from the working area as well as the adjacent Sebring dump site and trailer park pond. When the inspectors attempted to obtain a waste sample at the plant, they were questioned by ASF personnel because they had not "exercised a courteous manner in this situation." ASF would only allow OEPA to collect a sample if they allowed split samples between OEPA and ASF. The inspectors left without collecting any samples (Ref. 25).

In September 1980, a Part A Permit Application was submitted by ASF (Ref. 31). On June 16, 1981, ASF submitted a revised Part A Permit Application, identifying 800 tons per year of landfill disposal of wastes containing EP toxic levels of cadmium (D006). The application stated that particulate emissions containing heavy metals from electric furnace melting (EAF dust) were stored and treated on the premises of the facility and only non-hazardous wastes were landfilled (Ref. 29). Subsequently, on June 25, 1982, ASF withdrew its Part A Permit Application, indicating that further testing of the waste stream showed that "this facility has not and does not now treat, store or dispose of any hazardous waste" (Ref. 30).

On February 22, 1985, OEPA sent a letter to ASF indicating that material including EAF dust/sand washer sludge, waste bentonite and cereal-based binder materials, refractory brick, electric furnace slag, and floor sweepings were being disposed at the ASF Disposal Facility (SWMU 1). According to OEPA, these materials are considered solid wastes and disposal of these materials was to cease immediately (Ref. 34). In April 1985, the Mahoning County General Health District followed up with a letter advising ASF to cease disposal and file application for proper disposal of waste at licensed facilities with the OEPA (Ref. 35).

An environmental assessment of the ASF Disposal Facility (SWMU 1) was conducted by Bowser Morner Inc. in the summer of 1985, apparently in preparation of going through the permitting process for the unit (Refs. 38 and 49). The results of this investigation are discussed in Section 2.3. Concurrently, it remained ASF's contention that no hazardous or solid wastes were being disposed at the site (Ref. 38).

On April 26, 1985, OEPA conducted a RCRA compliance inspection of the manufacturing plant and ASF Disposal Facility (SWMU 1). It was determined that the facility was a generator of hazardous waste (EAF dust - EP toxic for cadmium), an unpermitted treatment facility (mixing the EAF dust with sand washer sludge in a roll-



off container), and disposing hazardous waste at an unpermitted TSD facility. Ten generator violations were outlined, including operating without an EPA Identification Number (the number they received previously was for the disposal site only), unpermitted treatment, improper waste analyses, no manifests, no labelling or placarding of wastes for transport, no training program, no recordkeeping, no safety equipment maintenance program, no contingency plan, no arrangements with local emergency services, and no designated emergency coordinator (Ref. 39).

ASF responded to the above Notice of Violation on August 8, 1985. ASF's contention was that the hazardous waste (EAF dust) was diluted (at a 36:1 ratio) and that the actual disposed material at the ASF Disposal Facility (SWMU 1) was not hazardous. All ASF test results reportedly supported this. ASF also contended that the treatment was done in a "totally enclosed treatment facility" and, as such, was exempt from permitting requirements (Ref. 42).

On November 20, 1985, a CERCLA Preliminary Assessment (PA) was completed for the ASF Disposal Facility (SWMU 1) by OEPA. The PA recommended medium priority for continued state activities and a low CERCLA priority due to current EPA involvement (Ref. 46).

On May 16, 1986, OEPA submitted to U.S. EPA a Facility Management Plan for ASF recommending that a U.S. EPA enforcement order be drafted (Ref. 51).

U.S. EPA requested a closure plan for the ASF Disposal Facility (SWMU 1) on April 9, 1987. ASF, in a letter dated April 23, 1987, reiterated that they were not subject to RCRA interim status regulations (Ref. 54).

On May 28, 1987, U.S. EPA filed a civil action against ASF for violations relating to the April 26, 1985 inspection as well as violations found during inspections on November 19, 1984, February 12, 1985, August 14, 1985, August 6 and 7, 1986, and January 8 and 9, 1987. The suit requested that the U.S. District Court require ASF to immediately cease disposal of hazardous waste at the ASF Disposal Facility (SWMU 1); that ASF submit closure and post-closure plans for the unit; that ASF comply with groundwater monitoring, financial assurance, and other interim status requirements; that ASF comply with all applicable RCRA requirements at the Alliance plant; that ASF cease treatment of hazardous wastes at the Alliance plant; and the court assess appropriate civil penalties (Ref. 57).

Following RCRA compliance inspections on August 27, 1987 and May 25, 1988, OEPA continued to cite ASF for the same violations as indicated during the April 26, 1985 inspection (Refs. 58 and 60).

In February 1989, U.S. EPA attempted to conduct a RCRA Facility Assessment Visual Site Inspection at the ASF facility. However, in response to the VSI Notification Letter, ASF denied access to the facility due to the "lack of statutory authority" by EPA to initiate corrective action at ASF. In addition, the pending litigation with U.S. EPA was cited as a reason for denial (Ref. 65). Subsequently, A.T. Kearney prepared a RCRA Preliminary Review (PR) report for the ASF facility without conducting the VSI (Ref. 68).

On June 8 and 9, 1989, a RCRA compliance inspection was conducted at the ASF facility. It was at this time that the Former East Solid Waste Storage Area (SWMU 14) and the Former Used Oil Storage Area (SWMU 15) were discovered and sampled. The wastes stored in drums at these units were found to be hazardous. Because of this, 22 violations were noted regarding lack of notification of hazardous waste management other than the notified EAF dust management. Major violations included no waste characterization, no manifests, no labelling, inadequate training program, inadequate reporting, inadequate contingency plan, storage of wastes in open drums, and no closure plan (Refs. 72 and 73).

On October 25, 1989, ASF responded to the above Notice of Violation. ASF indicated that their split samples of waste oil drums indicated non-detectable levels of solvents, thus indicating that the waste oil was nonhazardous. The paint waste split sample results indicated that the wastes were not characteristic ignitable, as OEPA claimed. Because of this, the violations cited by OEPA were based on the hazardous nature of the wastes and, according to ASF, were no longer relevant (Ref. 77).

On June 30, 1989, OEPA conducted a hazardous and solid waste inspection of the ASF Disposal Facility (SWMU 1). Ten violations were noted, including no waste analysis plan, no inspection plan, no personnel training program, inadequate maintenance and operation, no testing and maintenance of communication equipment, no contingency plan, no written operating record, not in compliance with manifesting requirements, no closure or post-closure plan, and not in compliance with landfill operating requirements (Ref. 74).

On July 2 and 3, 1990, OEPA conducted a solid and hazardous waste inspection of the ASF plant in Alliance and the ASF Disposal Facility (SWMU 1). Hazardous waste violations noted were storage in excess of 90 days, lack of proper labelling, storage of waste in open containers, no waste analysis plan, and other violations (Ref. 81). It was also found that solid wastes, including unspent foundry sand, pretreatment clarified sludge, and casting grinding waste, were being disposed at the disposal facility in violation of Ohio regulations (Ref. 83).

ASF's response, on December 13, 1990, to the above solid waste violations was the same as previous responses (i.e., that the wastes disposed at the ASF Disposal Facility (SWMU 1) are not "harmful or inimical to public health" and thus fall within the exemption to the solid waste definition). ASF indicated that they were considering a "recycle closure" program for the disposal site. This would involve removal of all disposed materials and recycling those materials which could be recycled (Ref. 84). ASF indicated during the VSI that this option was later determined not to be feasible and was dropped from consideration (Ref. 121).

OEPA completed a Comprehensive Groundwater Monitoring Evaluation of the ASF Disposal Facility (SWMU 1) on December 21, 1990. Several violations were noted, including lack of a groundwater monitoring program capable of determining impact on the uppermost aquifer, no background well, incomplete definition of the aquifer system, no sampling and analysis plan, background concentrations had not been determined, failure to obtain samples and analyze them at least semi-annually, and failure to prepare an outline of a groundwater quality assessment program (Ref. 86).

On May 7, 1991, OEPA conducted a hazardous waste inspection of the ASF Disposal Facility (SWMU 1). OEPA indicated that the facility had the same violations as noted for the July 2 and 3, 1990 inspection (Ref. 89). ASF's primary response to the violations was that, due to ongoing litigation with U.S. EPA, violations would be addressed at a later date, if necessary (Ref. 90).

ASF notified OEPA on July 9, 1991 that the handling and disposal practices for certain materials was changing. The following materials were no longer being disposed at the ASF Disposal Facility (SWMU 1): clarifier sludge, broken core butts, nonhazardous baghouse dust, and scrap metal (Ref. 91).

On November 1, 1991, OEPA referred ASF to the Ohio Attorney General's office for violations of the hazardous and solid waste laws of the State of Ohio (Ref. 93).

On November 26 and 27, 1991, OEPA conducted solid and hazardous waste inspections of ASF's plant and Disposal Facility (SWMU 1). Violations noted were similar to those in previous inspections. ASF's response was similar to past responses in that they contended that the disposal site was not a hazardous waste disposal facility and that violations would be addressed pending a draft Consent Decree with U.S. EPA (Ref. 100).

ASF indicated on January 3, 1992 that they had retained a consulting firm to prepare a closure and post-closure plan for the ASF Disposal Facility (SWMU 1). They also requested that a trench be dug at the landfill to determine the extent of layering (Ref. 94). On February 18, 1992, OEPA denied this request due to a lack of information (Ref. 96).

On February 20, 1992, ASF met with OEPA to address the possibility of using alternative foundry process materials, including sand, sludge, and slag, for use in capping the landfill as part of the closure process. OEPA agreed to consider this option as long as performance criteria were met (Ref. 97).

On May 11, 1992, OEPA conducted a solid and hazardous waste inspection of the ASF plant. The purpose of the inspection was to gather information relating to enforcement activities at ASF. The Former East Solid Waste Storage Area (SWMU 14) was inspected and determinations were made regarding the potential amount of waste to be excavated (Ref. 99).

On December 10, 1992, ASF entered into a Consent Decree (Ref. 102) with the U.S. EPA regarding the plant and the ASF Disposal Facility (SWMU 1). For the plant, ASF agreed to:

- 1) Immediately perform waste determinations for all wastes streams;
- 2) Submit to EPA a Notification of Hazardous Waste Activity as a generator;
- 3) Comply with all manifest, container labelling, recordkeeping, operating record, and reporting requirements;

- 4) Cease any treatment, storage, or disposal of hazardous wastes for greater than 90 days;
- 5) Develop a closure plan for the EAF Baghouse and Roll-off Box (SWMU 8) area and implement closure upon approval of the plan;
- 6) Submit a post-closure plan for the above unit if clean closure cannot be obtained; and
- 7) Comply with liability coverage, operating record, personnel training, emergency, contingency plan and inspection requirements.

For the disposal facility, ASF agreed to:

- 1) Submit and implement a closure plan to close the unit as a landfill and a post-closure plan in the event that clean-closure cannot be achieved;
- 2) Develop a Groundwater Sampling and Analysis Plan and a Groundwater Quality Assessment Plan;
- 3) Design, install, and maintain a groundwater monitoring system;
- 4) Submit written groundwater reports in accordance with reporting requirements;
- 5) Comply with all interim status requirements relating to groundwater;
- 6) Cease all treatment, storage, and disposal of any solid or hazardous wastes except as provided for in the approved closure plan;
- 7) Comply with all reporting, inspection, and personnel training requirements; and
- 8) Provide security at the facility.

A civil penalty of \$250,000 was also assessed (Ref. 102).

As of the VSI, ASF was in the process of negotiating a Consent Order with the Ohio Attorney General regarding violations at the plant in Alliance. RCRA closure is to be conducted at the Former

East Solid Waste Storage Area (SWMU 14) and the Former Used Oil Storage Area (SWMU 15), as well as the area underlying the Baghouse Waste Storage Area (SWMU 11). The final specifics of the Consent Order have yet to be determined (Refs. 103 and 121).

ASF had approximately 32 permitted and/or registered air sources at the time of the VSI, consisting mostly of Baghouses (SWMU 2). ASF indicated that in the past, entire areas of the plant, consisting of many sources, operated under one permit. OEPA requested that individual sources be permitted or registered. As a result of this, ASF also indicated that there were approximately 30 permit applications awaiting OEPA action (Refs. 107 and 121).

ASF submitted a stormwater permit application to OEPA on September 29, 1992 and, at the time of the VSI, was awaiting final permitting action (Refs. 121 and 123).

## **2.5 ENVIRONMENTAL SETTING**

The following sections describe the climate, area soils and surface waters, and area geology and hydrogeology in the vicinity of the ASF foundry and ASF Disposal Facility (SWMU 1).

### **2.5.1 Climate**

The Alliance, Ohio area receives an annual rainfall of 36 inches. The wettest month is June, with an average rainfall of 3.49 inches. The driest month is February, with an average rainfall of 2.20 inches (Refs. 101 and 124).

The average daily maximum temperature is 58.5 degrees and the average daily minimum temperature is 40.7 degrees. The month with the highest average daily temperature is July at 81.7 degrees. January has the lowest average daily temperature at 18.5 degrees. The average annual water loss has been 23 inches. The prevailing wind direction is from the southwest (Refs. 101 and 124).

### **2.5.2 Area Soils and Surface Waters**

The foundry is completely underlain by Urban land which is predominantly fill material with the original soil being unrecognizable. Results of drilling activities during UST investigations has confirmed that the foundry is underlain with approximately 21 feet of black foundry sand and slag. Underlying

the sand is light brown clayey gravel which may reflect the original soil conditions prior to construction of the foundry. The underlying bedrock, composed of a sandstone unit, exists at a depth of approximately 35 feet (Ref. 101). ASF personnel stated that the nearest surface water is the Mahoning River, located approximately 1/2 mile north of the facility (Ref. 121).

Soils adjacent to the ASF Disposal Facility (SWMU 1) generally consist of lean clay and clayey sand. Sandstone, shale, and siltstone outcrop on the east side of the unit and underlie it. The till in the area of the unit averages 10 percent sand, 48 percent silt, and 42 percent clay (Ref. 122).

Surface drainage from the ASF Disposal Facility (SWMU 1) flows generally to the southwest, towards Heacock Road, across the former Sebring dump site, and into a small tributary of the Mahoning River, located approximately 500 feet west of the unit. The confluence of the tributary with the Mahoning River exists approximately 3,000 feet to the southwest of the unit. ASF representatives indicated that the nearest surface water is a pond located immediately southeast of the unit. This pond, created by former strip mining activities, reportedly receives wastewater from the adjacent trailer park. Neither of the facilities are reportedly within any 100-year flood plain (Refs. 121 and 122).

### **2.5.3 Geology and Hydrogeology**

Very limited information is available on site-specific geology and hydrogeology relating to the foundry. The only known information is from a UST investigation report, which indicates that the underlying bedrock is a sandstone unit which exists at a depth of approximately 35 feet. The uppermost aquifer identified in the UST investigation report is located 23 feet below the surface. A water bearing zone within the sandstone unit is located at a depth of approximately 75 feet (Ref. 101).

A sizable amount of regional and site-specific geologic and hydrogeologic information is available for the ASF Disposal Facility (SWMU 1). The remainder of the information in this section is taken from documents discussing this unit.

The facility is located in the portion of the Allegheny Plateau physiographic province which was glaciated during Wisconsinan, Illinoisan, and pre-Illinoisan times. The surficial deposits southwest of the village of Sebring and in the vicinity of the

landfill are mapped as ground moraine. They were deposited by the Grand River Lobe and are late Wisconsinan in age. The ground moraine consists of the silty clay Hiran Till which is generally less than 10 feet thick. The Kent End Moraine is located approximately two miles to the southwest and consists mainly of Lavery Till (Ref. 122).

The bedrock in the vicinity of the village of Sebring is overlain by a thin veneer of glacial drift which averages less than 25 feet in thickness. The bedrock beneath the till consists of sedimentary rocks of Pennsylvanian Age which are divided into the Allegheny and Pottsville Groups. This sequence of rock strata consists of alternating thick and thin layers of sandstone and shale with thin lenses of limestone and coal. In Mahoning County, in the vicinity of the unit, the bedrock layers dip generally to the southwest at an approximate grade of one percent. Buried valleys are not present in the vicinity of the village of Sebring. However, along the general course of the Mahoning River there is evidence of an old valley floor. Valley fill in the vicinity of Alliance, located approximately one mile west of the unit, serves as a major aquifer in the region (Ref. 122).

The sandstone formations in Mahoning County generally yield adequate supplies of water for domestic use. The shale and limestone beds may yield moderate amounts of water. The surficial glacial clays yield little or no water, whereas coarse, well-sorted gravel deposits, if adjacent to a surface stream, may yield over 500 gallons per minute. Terrace gravels adjacent to the Mahoning River may yield over 1,000 gallons per minute; however, these gravels are not horizontally consistent and yields vary greatly (Ref. 122).

The ASF Disposal Facility (SWMU 1) is located within a former strip mine pit. The Middle Kittanning No. 6 and Lower Kittanning No. 5 coal beds were strip mined here in addition to the Lower Kittanning Underclay and some of the softer shale beneath it (Ref. 122).

Well logs indicate that strata adjacent to the unit are composed primarily of alternating thick and thin layers of sandstone and shale with varying thicknesses of coal and underclay. The uppermost aquifer in the vicinity of the unit is the Clarion Shale which is the unit underlying the coal beds that were mined at the site (Ref. 122).



Bedrock outcrops on the east side of the landfill and consists of thin interbeds of siltstone, shale, and sandstone. Secondary permeability is likely to occur in fractures and along bedding planes in this generally fine-grained sequence of sedimentary rock (Ref. 122).

Based on data obtained on May 22 and October 9 and 16, 1991, the inferred groundwater flow direction is to the west-southwest. Although the elevation of the groundwater at the ASF Disposal Facility (SWMU 1) is approximately 1,075 feet above mean sea level (msl) throughout most of the site, the depth to groundwater at the landfill varies from 8 to 52 feet below the surface due to the highly variable topography at the site (Ref. 122).

## **2.6 RECEPTORS**

The area surrounding the foundry is zoned for residential, commercial, and industrial use. The surrounding population of Alliance consists of 24,315 residents located within a 3-mile radius of the foundry (Ref. 101). The entire foundry is fenced, with the exception of a railroad spur which feeds the facility property. The ASF Disposal Facility (SWMU 1) area is primarily rural. However, a mobile home park is located immediately to the east of the unit (Ref. 121). Population data for the landfill area was not available.

Eleven wells are known to exist southeast and upgradient of the foundry. There are three wells located between the foundry and the Mahoning River. The available file materials do not indicate the specific usage of the wells (i.e., process, domestic or municipal) (Ref. 101). There are no known downgradient domestic water supply wells within 1,000 feet of the ASF Disposal Facility (SWMU 1). According to ASF, the only nearby domestic water supply wells which could potentially be affected by waters from the unit are those along Heacock Coal Road near Johnson Road, located southeast of the unit. One of these wells was reportedly sampled in 1980 and no unusual contamination was indicated (Ref. 49). File materials do not indicate whether the mobile home park is serviced by private wells; however, groundwater flow data collected through the years indicates that the park is located upgradient of the ASF Disposal Facility, with respect to surface elevation and groundwater flow.

As previously indicated, both the foundry and the disposal facility are located near the Mahoning River or its tributaries. The Mahoning River is used as a source of drinking water for the

City of Alliance. The Walborne Reservoir and the Deer Creek Reservoir also provide drinking water. However, according to ASF personnel, these sources are located upgradient of both facilities (Ref. 121).

### 3.0 SOLID WASTE MANAGEMENT UNITS (SWMUs)

This section describes in detail the SWMUs identified during the PA/VSI process. It includes descriptions of the units, dates of operation, wastes managed, release controls, release histories, and observations. Figure 2-2 shows the location of the SWMUs and AOCs.

#### **SWMU 1      ASF Disposal Facility**

**Unit Description:** The ASF Disposal Facility (see Photographs 26 to 30) is a landfill, formerly operated as a coal strip mine, which has been used as a disposal facility by ASF since 1966. The unit is approximately 14.7 acres in size. The fenced unit has been used for the disposal of EAF baghouse dust, a characteristic hazardous waste, from 1966 until 1987. The baghouse dust was mixed with clarifier sludge prior to disposal at the landfill. Other materials disposed at the unit include spent foundry sand from Baghouses (SWMU 2), clarifier sludge, furnace and ladle slag, and spent refractories. Wastes have been placed over an area of approximately 8 acres and range in thickness from a few feet to more than 45 feet near the south central part of the landfill. ASF has entered into a consent order with the U.S. EPA and OEPA to close the unit as a landfill. Currently wastes are being stockpiled at the unit until closure can be enacted (Refs. 102, 111, 121, and 122).

**Date of Start-up:** The unit began operation in 1967 (Ref. 4).

**Date of Closure:** The unit continues to receive waste material. Non-hazardous sand and clarifier sludge is to be used as fill and cap material as part of closure activities. It is being segregated and stockpiled on the surface at the unit (Ref. 121).

**Wastes Managed:** ASF disposed of EAF baghouse dust (D006) and (D008), clarifier sludge, spent foundry sand, furnace and ladle slag, and spent refractories at the unit. During OEPA and/or Mahoning County Health District inspections, metal, pipe, paper, tires, drums, household and food wastes, waste bentonite and cereal-based binder materials, and floor sweepings, as well as slurries and wet sludges from the process have been observed (Refs. 7, 15, 35, and 121)

**Release Controls:** There are no release controls associated with the unit (Ref. 121).

**History of Release:** In 1985, an environmental assessment was conducted at the unit. Surface water samples were collected from the former on-site pond (see Photographs 27 and 29), the creek upstream and downstream of the unit, the adjacent Sebring dump site pond, and the adjacent Tecumseh Trailer Court pond. Five soil borings were drilled at the unit. Four of these borings were converted to monitoring wells (see Photograph 30) and were sampled in July, August, and September 1985, August 1986, and September 1987. MW-1 was located northeast of the unit and was determined to be the background well. MW-2 through MW-4 were located along the western perimeter of the unit, between the unit and the former Sebring dump. The fifth boring was drilled in the emplaced waste material. ASF's findings indicated that the emplaced waste was below EP toxic levels. Certain parameters (COD, sulfate, conductivity, total kjeldahl nitrogen, total dissolved solids, and lead) were higher in MW-2 and MW-3 compared to the background MW-1. Lead levels ranged from 0.02 milligrams per liter (mg/l) to 0.13 mg/l. ASF attributed the elevated lead level to the adjacent Sebring dump. Surface waters did not appear to be affected; the highest lead levels were 0.06 mg/l and highest cadmium levels were 0.006 mg/l (Refs. 49 and 122). The results of this investigation, including sample locations, analytical data, and well logs are included in Attachment D.

**Observations:** As of the VSI, closure had not yet begun on the unit. As part of the December 10, 1992 Consent Decree, ASF is required to conduct a comprehensive groundwater monitoring program at the unit. A Groundwater Quality Assessment Plan (Ref. 122) has been submitted to the regulatory agencies. The program consists of seventeen existing and proposed wells to be sampled and analyzed quarterly for one year. Samples will be analyzed for various organic and inorganic parameters (Ref. 122).

At the time of the VSI, wastes were being stockpiled at the site in preparation for use in capping the unit at closure. A conveyor screening system (see Photograph 28) was set up to segregate the sand and sludge wastes into various piles according to particle size. At the time of the VSI, the conveyor was not working, but piles were evident. The plan is to mix the sand with the sludge to create a capping material of adequate permeability for use as a cap. Larger particles will be used to fill the unit to surrounding grade (Ref. 121).

## **SWMU 2      Baghouses**

**Unit Description:** Associated with cleaning and finishing processes are numerous baghouses (see Photographs 1 and 10) located throughout the facility. These units, numbering approximately 22 permitted or registered units, manage waste sand, shot blast, metal fines, etc. generated during storage, manufacturing and processes. Based on VSI observations, bags within the baghouses are gravity-fed. When bags (generally fiberglass or plastic) have been filled, they are stored at the Baghouse Waste Storage Area (SWMU 11) prior to being removed offsite, either to the American Waste Landfill in Canton, Ohio or the BFI Willow Creek Landfill, in Alliance. In addition, some of the sand fines are disposed at the ASF Disposal Facility (SWMU 1) (Refs. 106, 107, and 121).

**Date of Start-up:** Various units have become operational over the life of the facility (Ref. 121).

**Date of Closure:** The units are currently operating (Ref. 121).

**Wastes Managed:** The units manage waste shot blast, sand, and metal fines (Ref. 121)

**Release Controls:** There are no release controls other than the units themselves, which are enclosed structures (Ref. 121).

**History of Release:** The units routinely discharge to air under OEPA permits (Ref. 121).

**Observations:** No evidence of release, other than permitted, was observed during the VSI (Ref. 121).

### **SWMU 3      Satellite Accumulation Areas (3)**

**Unit Description:** Three Satellite Accumulation Areas are located at the Maintenance Garage (see Photograph 4), the Building and Equipment (B & E) maintenance department (see Photograph 15), and the Powerhouse. These units primarily manage waste oils and water-based wastes (ethylene glycol, synthetic oils, etc.). Each unit consists of two 55-gallon drums contained in polypropylene overpacks. Wastes from these units are taken to the Container Storage Area (SWMU 7) (Ref. 121).

**Date of Start-up:** The units began operation in 1990 (Ref. 121).

**Date of Closure:** The units are currently operating (Ref. 121).

**Wastes Managed:** The units manage waste oils and water-based wastes including ethylene glycol and synthetic oils (Ref. 121).

**Release Controls:** The units are located in overpack drums and indoors with a concrete floor (Ref. 121).

**History of Release:** No evidence of release was noted in the file materials or observed during the VSI. Some slight spillage to the concrete floor was observed at most of the units (Ref. 121).

**Observations:** The units were observed to be self-contained, closed, and in good condition. No evidence of release was observed (Ref. 121).

**SWMU 4      Parts Cleaners (8)**

**Unit Description:** There are approximately eight Parts Cleaners (see Photographs 5, 7, 8 and 16) at the foundry. The units are containers of various sizes, which contain petroleum solvent-based cleaning solutions. These units are located throughout the manufacturing plant and are used for cleaning metal equipment. The units vary in size from 15 to 50 gallons. The tanks contain petroleum naphtha used as a cleaning and degreasing agent for tools and machine parts. The petroleum naphtha solution is recirculated within the unit. Safety-Kleen periodically services the units and replaces the solution (Ref. 121).

**Date of Start-up:** The units began operation in 1989 (Ref. 121).

**Date of Closure:** The units are currently active (Ref. 121).

**Wastes Managed:** The units manage petroleum naphtha containing waste oils and greases (Ref. 121).

**Release Controls:** The units are self-enclosed and located indoors on a concrete floor.

**History of Release:** No evidence of release was noted in the file materials or observed during the VSI (Ref. 121).

**Observations:** The units were all maintained with the lids closed. No evidence of spillage was observed (Ref. 121).

## **SWMU 5      Spray Booth Filter Systems (2)**

**Unit Description:** This unit consists of the filter systems associated with two spray booths at the foundry. In the process of making the sand molds, a fine sand/water mixture is sprayed onto the molds in one of the two spray booths. The unit (see Photograph 6) is located in the Core Room. One wall within the spray booth has 21 filters. Air is drawn through these filters while spraying takes place. The filters from this process are changed out approximately every two months and taken to the American Waste Landfill in Canton, Ohio (Ref. 121).

Some products are painted black in the second spray booth. The unit (see Photograph 12) is located in the New Building. Filters are located on two walls and air is drawn through while painting takes place. Waste filters from this process are placed in the Paint Waste and Wood Roll-off Box (SWMU 6). The waste is then removed by BFI and taken to the Willow Creek Landfill in Alliance. ASF indicated that the waste paint is water-based and that analytical data indicates that the material is non-hazardous. This was confirmed by analytical data provided by ASF (Refs. 104, 105, and 121).

**Date of Start-up:** The sand mold booth began operation in 1992. The paint booth began operation in the early 1980s (Ref. 121).

**Date of Closure:** The units are currently in operation (Ref. 121).

**Wastes Managed:** The units manage waste paint solids and sand/water mixture. The waste paint is reportedly non-hazardous (Refs. 104, 105 and 121).

**Release Controls:** The spray operations are located indoors on a concrete floor (Ref. 121).

**History of Release:** The booths are permitted to release to air. No other evidence of release was noted in the file material or observed during the VSI (Ref. 121).

**Observations:** No evidence of release was observed during the VSI (Ref. 121).



**SWMU 6      Paint Waste and Wood Roll-off Box**

**Unit Description:** The unit is a 20 cubic yard metal roll-off box specifically used for the disposal of paint wastes from one of the Spray Booths (SWMU 5), including filters and solids, and wood waste, primarily scrap pallets. The unit is owned and serviced by BFI. The unit (see Photograph 12) is located outside the New Building, where the spray booth is located. The waste material is taken to the BFI Willow Creek Landfill in Alliance (Ref. 121).

**Date of Start-up:** The unit began operation in 1989 (Ref. 121).

**Date of Closure:** The unit is currently operating (Ref. 121).

**Wastes Managed:** The unit manages waste paint solids and filters, as well as wood wastes (Ref. 121).

**Release Controls:** There are no release controls associated with the unit (Ref. 121).

**History of Release:** No evidence of release was noted in the file material or observed during the VSI (Ref. 121).

**Observations:** No evidence of release was observed during the VSI (Ref. 121).

## **SWMU 7      Container Storage Area**

**Unit Description:** The Container Storage Area is a less-than-90-day indoor storage area for liquid and solid wastes generated at the facility. The unit (see Photographs 2 and 3) is located in the flammable materials storage building. The southwest corner of the building has been designated for this unit. The entire building is bermed for spill control. At the time of the VSI, 17 drums were observed stored at the unit on wooden pallets. The majority of the materials stored at the unit are non-hazardous wastes including used motor oil, coolants, soil cuttings and oil/water mixtures. In addition, some hazardous wastes are stored at the unit, including Safety-Kleen solvent (Ref. 121).

**Date of Start-up:** The unit began operation in approximately 1987 (Ref. 121).

**Date of Closure:** The unit is currently operating (Ref. 121).

**Wastes Managed:** At the time of the VSI, the following wastes were being stored at the unit: used motor oil, used anti-freeze, used coolant (water base), soil cuttings, general purpose grease and water, soil and diesel fuel, used oil, mixture oil and water, Safety-Kleen solvent, hi temp grease, and coolant water and oil (Ref. 121).

**Release Controls:** The unit is located indoors on a concrete floor. In addition, the entire building (including doorways) has a six-inch concrete berm and has fire protection (Ref. 121).

**History of Release:** No evidence of release was noted in the file material or observed during the VSI (Ref. 121).

**Observations:** The drums and floor of the unit appeared to be in good condition. No evidence of release was observed (Ref. 121).

**SWMU 8      EAF Baghouse and Roll-off Box**

**Unit Description:** The steel used in the foundry is melted in an electric arc furnace generating electric arc furnace (EAF) dust. The dust, which is hazardous based on TCLP levels for lead and cadmium, is collected by the EAF Baghouse and Roll-off Box. The unit (see Photographs 24 and 25) is located outside the melted metals portion of the plant. The roll-off box is a covered 20 cubic yard metal hopper. Beginning in 1990, a water/sugar (glutrin) mixture was added to the waste in the roll-off box as a dust control measure. The waste is then removed offsite and treated at Envirite Corporation in Canton, Ohio (Refs. 68 and 121).

Prior to 1987, the EAF dust was mixed with the sludge mixture from the Wastewater Treatment System (SWMU 9) and disposed at the ASF Disposal Facility (SWMU 1). The mixing took place in tank trucks at the current location of the roll-off box. As part of the Consent Decree entered into with the U.S. EPA, ASF must conduct a closure of the former mixing area (Ref. 121).

**Date of Start-up:** The unit in its current configuration began operating in 1987. Prior to 1987, the EAF dust was mixed in tank trucks at the current location of the roll-off box (Ref. 121).

**Date of Closure:** The unit is currently in use (Ref. 29).

**Wastes Managed:** The unit manages EAF dust, a hazardous waste due to characteristically toxic levels of cadmium (D006) and lead (D008).

**Release Controls:** The unit is covered to prevent air releases (Ref. 121).

**History of Release:** No evidence of release was noted in the file material or observed during the VSI. The mixing operations at the roll-off box location may have resulted in releases to the soil. The area is to be RCRA-closed, as directed by the Consent Order entered into with the U.S. EPA (Refs. 103 and 121).

**Observations:** No evidence of release was observed during the VSI (Ref. 121).

## **SWMU 9      Wastewater Treatment System**

**Unit Description:** This unit is used to treat wastewater generated in a sand-washing process. Green silica sand, a binding agent (phenolic resin), and some fine chromite sand are used for molding in the manufacturing process. After this usage, the sand is routed to a sand washer, where impurities are washed out of the sand. The wastewater from the sand washing process is routed to the Wastewater Treatment System. The Wastewater Treatment System (see Photographs 17 to 21) consists of a clarifier, a chlorine dioxide treatment unit, two sludge holding tanks, a filter press and six cubic yard roll-off boxes.

The clarifier is a 100,000-gallon in-ground tank which promotes settling out of solids from the wastewater. Alum and polymer are added to the wastewater to stimulate separation. The clarifier is located outside the B & E Building. After clarification, the water is either reused in the sand washer or treated with chlorine dioxide to reduce phenol concentrations and discharged to the City of Alliance POTW. The solid portion from the clarifier is routed inside the B & E Building to two aboveground 3000-gallon steel holding tanks prior to dewatering in the filter press. From the filter press, the sludge is pumped into 6-cubic yard roll-off boxes and then trucked to the ASF Disposal Facility (SWMU 1). Figure 4-1 presents a schematic depiction of flow within the Wastewater Treatment System (Ref. 121).

**Date of Start-up:** The unit has been operating since prior to 1958 (Ref. 1).

**Date of Closure:** This unit is currently in use (Ref. 121).

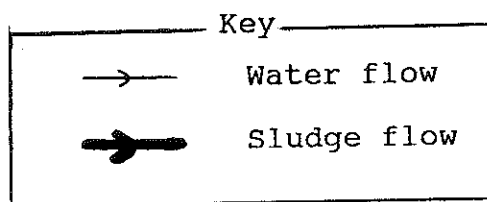
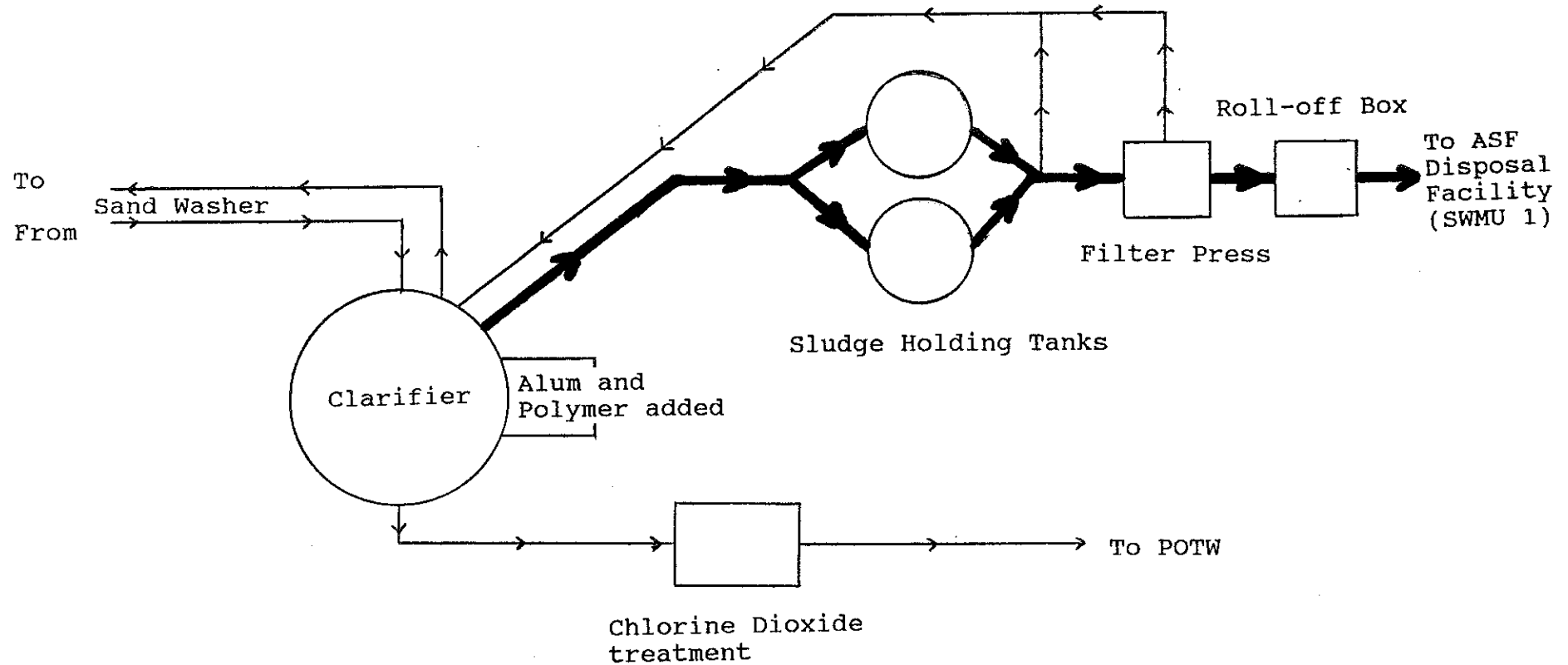
**Wastes Managed:** The unit manages wastewater containing foundry sand (Ref. 121).

**Release Controls:** All portions of the unit except the clarifier are located indoors on a concrete floor (Ref. 121).

**History of Release:** No evidence of release was noted in the file material or observed during the VSI (Ref. 121).

**Observations:** No evidence of release was observed during the VSI (Ref. 121).

FIGURE 4-1  
WASTEWATER TREATMENT SYSTEM (SWMU 9)  
FLOW DIAGRAM



(Reference 121)

## **SWMU 10     Stormwater Sewer System**

**Unit Description:** The Stormwater Sewer System (see Photograph 32) manages surface runoff from the exterior portions of the plant. The unit is constructed of concrete. There are three discharge points located at the foundry. The unit discharges to the City of Alliance POTW. ASF is currently seeking a stormwater discharge permit from OEPA. The permit will cover discharges from the unit to the city storm sewer, which flows to the Alliance POTW (Refs. 121 and 123).

**Date of Start-up:** The date of start-up for the unit is unknown (Ref. 121).

**Date of Closure:** This unit is currently in use (Ref. 121).

**Wastes Managed:** The unit manages surface runoff wastewater (Ref. 121). Prior to 1963, the unit apparently managed water discharged from wet dust collectors (Ref. 1).

**Release Controls:** There are no apparent release controls associated with the unit (Ref. 121).

**History of Release:** No evidence of release was noted in the file material or observed during the VSI (Ref. 121).

**Observations:** No evidence of release was observed during the VSI (Ref. 121).

## **SWMU 11     Baghouse Waste Storage Area**

**Unit Description:** When bags (generally fiberglass or plastic) from various Baghouses (SWMU 2) have been filled, they are stored at the Baghouse Waste Storage Area. This unit (see Photograph 14) is an unpaved storage area located outside the New Building. Bags are stored on wooden pallets at the unit. Approximately 100 bags were stored at the unit at the time of the VSI. The bags are removed offsite, either to the American Waste Landfill in Canton, Ohio or the BFI Willow Creek Landfill, in Alliance, Ohio. In addition, some of the sand fines are disposed at the ASF Disposal Facility (SWMU 1) (Ref. 121).

The Baghouse Waste Storage Area is located in an area where waste paint solids were observed being stored on the ground during a June 1989 OEPA inspection. ASF is currently negotiating with the State of Ohio regarding a Consent Order which directs ASF to conduct RCRA closure of the area in association with closure of the Former East Solid Waste Storage Area (SWMU 14) (Refs. 70, 103, and 121).

**Date of Start-up:** Disposal of paint solids began at an unknown date. The unit began operation in its current configuration in 1991 (Ref. 121).

**Date of Closure:** This unit is currently in use (Ref. 121).

**Wastes Managed:** The unit manages waste sand, dust, shot blast, metal fines, and other solids (Ref. 121).

**Release Controls:** There are no apparent release controls associated with the unit (Ref. 121).

**History of Release:** During a June 9, 1989 inspection conducted by OEPA personnel, paint sludges located on a pile at this unit were observed. Run-off water from the unit was also observed. Samples of the paint sludges were collected and analyzed. In addition, drums were observed and sampled. The wastes in the drums were determined to be characteristically ignitable (D001) (Ref. 76). As indicated above, this unit is to be addressed as part of the Consent Order currently being negotiated with the State of Ohio (Ref. 103).

**Observations:** No evidence of release was observed during the VSI (Ref. 121).

**SWMU 12 Barium Dust Storage Area**

**Unit Description:** A wire feed welding process for certain products generates a barium dust which is a hazardous waste. The dust accumulates in a "smoke eater" device and is managed by the Barium Dust Storage Area. This unit is a less-than-90-day accumulation area consisting of a covered 55-gallon drum. The unit (see Photograph 11) is located in the New Building. The waste is removed from the storage area to the EAF Roll-off Box (SWMU 8) prior to removal offsite (Ref. 121).

**Date of Start-up:** The unit began operation in 1989 (Ref. 121).

**Date of Closure:** The unit is currently in operation (Ref. 121).

**Wastes Managed:** The unit manages dust containing barium (D005) at toxic levels (Ref. 121).

**Release Controls:** The unit is located indoors on a concrete floor (Ref. 121).

**History of Release:** No evidence of release was noted in the file materials or observed during the VSI (Ref. 121).

**Observations:** The unit was empty at the time of the VSI. No evidence of release was observed during the VSI (Ref. 121).



### **SWMU 13     Refuse Dumpsters**

**Unit Description:** Refuse Dumpsters (see Photograph 9) are located throughout the plant property. They manage various solid wastes and refuse, including spent fiberfax, trash, floor sweepings, cardboard, plastic from shell sand containers, sawdust, paint waste, scrap wood, office paper, receiving/packaging material, scrap urethane, and broken grinding wheels. The wastes are taken to the BFI Willow Creek Landfill in Alliance, Ohio (Refs. 111, 112, 113, 114, 116, 117, 118, and 121).

**Date of Start-up:** The unit began operation in 1989 (Ref. 121).

**Date of Closure:** The unit is currently in operation (Ref. 121).

**Wastes Managed:** Various solid wastes and refuse, including spent fiberfax, trash, floor sweepings, cardboard, plastic from shell sand containers, sawdust, paint waste, scrap wood, office paper, receiving/packaging material, scrap urethane, and broken grinding wheels (Refs. 111, 112, 113, 114, 116, 117, 118, and 121).

**Release Controls:** There are no apparent release controls associated with the unit (Ref. 121).

**History of Release:** No evidence of release was noted in the file materials or observed during the VSI (Ref. 121).

**Observations:** No evidence of release was observed during the VSI (Ref. 121).

**SWMU 14    Former East Solid Waste Storage Area**

**Unit Description:** The Former East Solid Waste Storage Area was identified during a June 1989 inspection by OEPA personnel. The unit (see Photographs 22 and 31) is a former above-ground disposal area for foundry sand, spent and unspent cores, paint filters, paint sludge, and containers. The unit, measuring approximately 250 feet by 150 feet, is located in the northeast portion of the property. ASF is currently negotiating with the State of Ohio regarding a Consent Order directing ASF to conduct RCRA closure of the unit (Refs. 70, 72, 76, 103, and 121).

**Date of Start-up:** The date of start-up for disposal at the unit was not provided by facility representatives (Ref. 121).

**Date of Closure:** The unit will be closed as part of the Consent Order currently being negotiated with the State of Ohio (Ref. 103).

**Wastes Managed:** The unit managed foundry sand, spent and unspent cores, paint filters, paint sludge, and containers (Ref. 76).

**Release Controls:** There are no apparent release controls associated with the unit (Ref. 121).

**History of Release:** Samples from standing water near the unit indicated acetone at 490 ppm (Ref. 92).

**Observations:** No evidence of release was observed during the VSI (Ref. 121).

**SWMU 15     Former Used Oil Storage Area**

**Unit Description:** The Former Used Oil Storage Area (see Photograph 23) was observed during a June 1989 OEPA inspection. Approximately 70 used oil drums were stored at that time on the ground. A composite sample of these drums was collected and determined to contain chlorinated and non-chlorinated solvents in excess of 3,000 ppm. The drums have been removed and disposed off-site by ASF. ASF is currently negotiating with the State of Ohio regarding a Consent Order directing ASF to conduct RCRA closure of the unit (Refs. 70, 72, 76, 103, and 121).

**Date of Start-up:** The date of start-up for disposal at the unit was not provided by facility representatives (Ref. 121).

**Date of Closure:** The unit will be closed as part of the Consent Order currently being negotiated with the State of Ohio (Ref. 103).

**Wastes Managed:** The unit managed used oils containing chlorinated and non-chlorinated solvents (Ref. 76).

**Release Controls:** There are no apparent release controls associated with the unit (Ref. 121).

**History of Release:** No evidence of releases was noted in the file materials or observed during the VSI (Ref. 121).

**Observations:** The area is currently being used for scrap steel storage. No evidence of release was observed during the VSI (Ref. 121).

was found at up to 110 ppb. Xylene was found at up to 8,100 ppb. Total petroleum hydrocarbon was found at up to 30,800 ppb. A site characterization investigation was conducted in April 1992. Four shallow and one deep boring were drilled in the area. The deep boring was drilled to determine the impact on the uppermost aquifer, found at 23 feet deep. Total petroleum hydrocarbon contamination (up to 8.1 ppm) was found in the groundwater. Total petroleum hydrocarbons were found in the soil at levels up to 7,400 ppm. ASF concluded that the contamination was confined to a relatively small area and that no threat to the public health or the environment was posed by leaving the contamination in place (Ref. 129).

On June 26, 1990, ASF removed Tank 3. Soils surrounding the tank had total petroleum hydrocarbon levels up to 140 ppm. The contaminated soil was removed and disposed (Ref. 128).

ASF indicated during the VSI that a seventh tank had been recently found in the area outside of the wood pattern shop. A contractor had been hired to determine the existence and condition of this tank. A tank was found and the contents had not been determined as of the writing of this report. ASF plans to remove the tank according to BUSTR (Ref. 121). No further information was available on this tank.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

The PA/VSI identified 15 SWMUs and one AOC at the American Steel Foundries facility. Background information on the facility's location, operations, waste generating processes, release history, regulatory history, and environmental setting is presented in Section 2.0. SWMU-specific information, including unit descriptions, types of waste managed, release controls, release histories, and visual observations is discussed in Section 3.0. AOCs are discussed in Section 4.0. The following are conclusions and recommendations for each SWMU and AOC.

### **SWMU 1      ASF Disposal Facility**

**Conclusions:** Due to the emplacement of wastes directly on the ground, the soil and groundwater are likely to have been impacted by releases of hazardous constituents. No evidence was found in the file materials or during the VSI that surface water or air have been impacted.

**Recommendations:** Further action is necessary to determine the effect of the unit on the soil and groundwater. The unit is to be closed as a landfill per a Consent Decree between ASF and the U.S. EPA. As part of the agreement, a groundwater monitoring program is to be established. Therefore, it is suggested that closure activities and the groundwater monitoring program be monitored by EPA personnel.

### **SWMU 2      Baghouses**

**Conclusions:** No evidence of release was found in the file material or the information provided by the facility and no evidence of release was observed during the VSI, other than OEPA-permitted air releases from the units. Due to the enclosed nature and primarily indoor location of the units, the potential for release to soil, groundwater, or surface water is low. Due to the nature of the wastes, the potential for subsurface gas generation is low.

**Recommendations:** No further action is suggested for this SWMU.

### **SWMU 3      Satellite Accumulation Areas (3)**

**Conclusions:** No evidence of release was found in the file material or the information provided by the facility and no evidence of release was observed during the VSI. The units are all located indoors on a concrete floor and are enclosed within overpack drums. Therefore, the potential for a release to groundwater, surface water, soil, air, or subsurface gas generation at this SWMU is low.

**Recommendations:** No further action is suggested for this SWMU.

### **SWMU 4      Parts Cleaners (8)**

**Conclusions:** No evidence of release was found in the file material or the information provided by the facility and no evidence of release was observed during the VSI. The units are located indoors on a concrete floor and are maintained with closed lids. Therefore, the potential for a release to groundwater, surface water, soil, air, or generation of subsurface gas at this SWMU is low.

**Recommendations:** No further action is suggested for this SWMU.

### **SWMU 5      Spray Booth Filter Systems (2)**

**Conclusions:** No evidence of release was found in the file material or the information provided by the facility. The units are permitted to release to air. The units are located indoors on a concrete floor. Therefore, the potential for a release to groundwater, surface water, soil, or subsurface gas generation at this SWMU is low.

**Recommendations:** No further action is suggested for this SWMU.

### **SWMU 6      Paint Waste and Wood Roll-off Box**

**Conclusions:** No evidence of release was found in the file material or the information provided by the facility and no evidence of release was observed during the VSI. The unit is located on a paved area. Therefore, the potential for a release to groundwater, surface water, soil or subsurface gas generation

at this SWMU is low. A unit manages relatively non-volatile wastes, therefore, the potential for a release to air is also low.

**Recommendations:** No further action is suggested for this SWMU.

#### **SWMU 7      Container Storage Area**

**Conclusions:** No evidence of release was found in the file material or the information provided by the facility and no evidence of release was observed during the VSI. The unit is located indoors on a concrete floor. The entire building is bermed. Therefore, the potential for a release to groundwater, surface water, soil, air, or subsurface gas generation at this SWMU is low.

**Recommendations:** No further action is suggested for this SWMU.

#### **SWMU 8      EAF Baghouse and Roll-off Box**

**Conclusions:** No evidence of release was found in the file material or the information provided by the facility and no evidence of release was observed during the VSI. The baghouse discharges to air under an OEPA permit. The roll-off box is covered by a tarp. Therefore, the current potential for a release to groundwater, surface water, soil, or subsurface gas generation at this SWMU is low. Past operating practices (mixing of clarifier sludge and EAF baghouse dust in tanker trucks) may have led to a release to the ground at this unit. Closure of the unit with respect to past practices is being addressed under the Consent Decree entered into by ASF and U.S. EPA.

**Recommendations:** It is suggested that the EPA continue to monitor the negotiated closure activities at this unit.

#### **SWMU 9      Wastewater Treatment System**

**Conclusions:** No evidence of release was found in the file material or the information provided by the facility and no evidence of release was observed during the VSI. All portions of the unit except the clarifier are located indoors on a concrete floor. The unit discharges to the City of Alliance POTW under

permit. Therefore, the potential for a release to groundwater, surface water, soil, air, or subsurface gas generation at this SWMU is low.

**Recommendations:** No further action is suggested for this SWMU.

#### **SWMU 10 Stormwater Sewer System**

**Conclusions:** The unit discharges to the City of Alliance POTW under permit. No evidence of release was found in the file material or the information provided by the facility and no evidence of release was observed during the VSI. Therefore, the potential for a release to groundwater, surface water, soil, air, or subsurface gas generation at this SWMU is low.

**Recommendations:** No further action is suggested for this SWMU.

#### **SWMU 11 Baghouse Waste Storage Area**

**Conclusions:** No evidence of release was found in the file material or the information provided by the facility and no evidence of release was observed during the VSI. The wastes are stored in a non-paved area but are non-hazardous in nature. Therefore, the current potential for a release to groundwater, surface water, soil, air, or subsurface gas generation at this SWMU is low. Past operating practices at this unit may have led to a release to the ground. Closure of the unit with respect to past practices is being addressed under the Consent Order currently being negotiated with the State of Ohio.

**Recommendations:** It is suggested that the EPA monitor the negotiated closure activities at this unit.

#### **SWMU 12 Barium Dust Storage Area**

**Conclusions:** No evidence of release was found in the file materials or the information provided by the facility and no evidence of release was observed during the VSI. The wastes are stored within a covered 55-gallon drum, within a building with a concrete floor. Therefore, the potential for a release to groundwater, surface water, soil, air, or subsurface gas generation at this SWMU is low.



**Recommendations:** No further action is suggested for this unit.

**SWMU 13 Refuse Dumpsters**

**Conclusions:** No evidence of release was found in the file material or the information provided by the facility and no evidence of release was observed during the VSI. The wastes are stored in both paved and non-paved areas, but are non-hazardous in nature. Therefore, the potential for a release to groundwater, surface water, soil, air, or subsurface gas generation at this SWMU is low.

**Recommendations:** No further action is suggested for this SWMU.

**SWMU 14 Former East Solid Waste Storage Area**

**Conclusions:** Potentially hazardous wastes are documented to have been stored on the ground at this unit. Sampling has indicated that standing water within the unit contained hazardous constituents. Therefore, the potential for a release to groundwater, surface water, and soil is high. The potential for release to air or subsurface gas generation is low. Closure of the unit with respect to past practices is being addressed under the Consent Order currently being negotiated with the State of Ohio.

**Recommendations:** It is suggested that the EPA monitor the negotiated closure activities at this unit.

**SWMU 15 Former Used Oil Storage Area**

**Conclusions:** Drums containing hazardous constituents were observed being stored on the unpaved ground at this unit. Therefore, the potential for release to groundwater, surface water, and soil is moderate. The potential for release to air or subsurface gas generation is low. Closure of the unit with respect to past practices is being addressed under the Consent Order currently being negotiated with the State of Ohio.

**Recommendations:** It is suggested that the EPA monitor the negotiated closure activities at this unit.

## **AOC A      Underground Storage Tanks**

**Conclusions:** It appears that USTs have been addressed under the guidance of the State Fire Marshal, Bureau of Underground Storage Tank Regulations (BUSTR). All but two of the tanks have been either removed or closed in place, to the apparent approval of the state. One tank remains in use and has been found to not leak. One tank has been recently discovered and is currently being addressed. It is scheduled for removal in the near future. The contents of the tank are not yet known.

**Recommendations:** It is suggested that EPA monitor closure activities for the recently discovered tank, in the event that it may have managed hazardous constituents.

Suggested further actions for each of the SWMUs and AOCs is summarized in Table 5-1.

TABLE 5-1

## SWMUs, AOC, AND SUGGESTED FURTHER ACTIONS

UNIT	OPERATIONAL DATES	EVIDENCE OF RELEASE	SUGGESTED FURTHER ACTION
SWMU 1 - ASF Disposal Facility	1967 to present	Elevated lead levels in groundwater.	Continued monitoring of the closure activities and groundwater monitoring program established in the Consent Decree.
SWMU 2 - Baghouses	Unknown to present	None	None
SWMU 3 - Satellite Accumulation Areas (3)	1990 to present	None	None
SWMU 4 - Parts Cleaners (8)	1989 to present	None	None
SWMU 5 - Spray Booth Filter Systems (2)	1) 1992 to present; and 2) early 1980s to present	None	None
SWMU 6 - Paint Waste and Wood Roll-Off Box	1989 to present	None	None
SWMU 7 - Container Storage Area	Approximately 1987 to present	None	None
SWMU 8 - EAF Baghouse and Roll-Off Box	1987 to present	None	Continued monitoring of the closure activities established in the Consent Decree.
SWMU 9 - Wastewater Treatment System	1958 to present	None	None
SWMU 10 - Stormwater Sewer System	Unknown to present	None	None

TABLE 5-1

SWMUs, AOC, AND SUGGESTED FURTHER ACTIONS  
(CONTINUED)

UNIT	OPERATIONAL DATES	EVIDENCE OF RELEASE	SUGGESTED FURTHER ACTION
SWMU 11 - Baghouse Waste Storage Area	Unknown to Present	Paint sludges disposed on the ground.	Monitor the closure activities addressed under the Consent Order being negotiated by ASF and the State of Ohio.
SWMU 12 - Barium Dust Storage Area	1989 to present	None	None
SWMU 13 - Refuse Dumpsters	1989 to present	None	None
SWMU 14 - Former East Solid Waste Storage Area	Unknown to present	Foundry sand, paint filters and sludge disposed on the ground.	Monitor the closure activities addressed under the Consent Order being negotiated by ASF and the State of Ohio.
SWMU 15 - Former Used Oil Storage Area	Unknown to present	None	Monitor the closure activities addressed under the Consent Order being negotiated by ASF and the State of Ohio.
AOC A - Underground Storage Tanks	Installation dates unknown; Three tanks were closed in place; Two tanks were removed; One tank is in place, but not in use; One tank is currently being used.	Elevated levels of petroleum hydrocarbons, toluene and xylene in subsurface soils.	Monitor closure activities for the recently discovered tank.

## 6.0 REFERENCES

1. Notes on Comprehensive Plans of Proposed Facilities for Treatment of Industrial Wastes at the American Steel Foundries, Alliance, John E. Richards, Assistance Sanitary Engineering, December 4, 1958.
2. Letter to John E. Richards, Engineer in Charge, Ohio Department of Health, from Lowell A. Van Den Berg, Senior Assistant Sanitary Engineer, Department of Health, Education and Welfare, Re: Copy of the Waste Survey Report on the Wastes at American Steel Foundries, Inc., August 14, 1963.
3. Letter to Ray W. Fenton, M.D., Health Commissioner, Mahoning County General Health District, from H.G. Robertson, Works Manager, American Steel Foundries, Re: Information on Regulations for the Disposal of Industrial Waste, July 21, 1967.
4. Letter to H.G. Robertson, Works Manager, American Steel Foundries, from Ray W. Fenton, M.D., Health Commissioner, Mahoning County General Health District, Re: Formal Approval of Property in Smith Township for the Operation of an Industrial Waste Disposal Area, August 7, 1967.
5. Letter to Ray W. Fenton, M.D., Health Commissioner, Mahoning County General Health District, from R.J. Bosson, Works Manager, American Steel Foundries, Re: 1970 Refuse Disposal Permit, December 12, 1969.
6. Sanitary Landfill Inspection Form, Mahoning County Health District, December 16, 1971.
7. Sanitary Landfill Inspection Form, Mahoning County Health District, February 3, 1972.
8. Letter to American Steel Foundries, Inc., from John W. Cashman, M.D., Chairman, Water Pollution Control Board, Re: Alliance Industrial Wastes, September 26, 1972.
9. Ohio Environmental Protection Agency, Authorization to Discharge Under the National Pollutant Discharge Elimination System, American Steel Foundries, No date.

10. Sanitary Landfill Inspection Form, Mahoning County Health District, March 20, 1974.
11. Sanitary Landfill Inspection Form, Mahoning County Health District, April 24, 1974.
12. Sanitary Landfill Inspection Form, Mahoning County Health District, August 26, 1974.
13. Sanitary Landfill Inspection Form, Mahoning County Health District, November 18, 1974.
14. Sanitary Landfill Inspection Form, Mahoning County Health District, March 5, 1975.
15. Sanitary Landfill Inspection Form, Mahoning County Health District, April 4, 1975.
16. Letter to Joseph Pink, Sanitarian, Mahoning County Health Department, from Jack L. Burgan, District Sanitarian, State of Ohio Protection Agency, Re: Mahoning County On-Site Disposal Sites, October 29, 1976.
17. Report Form, On-Site Disposal of Solid Waste, American Steel Foundries, January 7, 1977.
18. Letter to Paul Cramer, Mahoning County Health Department, from Mark Bergman, Environmental Technician, Ohio EPA, Re: Solid Waste, Mahoning County, December 21, 1978.
19. Letter to Ralph W. Everett, Chief, NPDES Permit Records Section, Ohio EPA, from Edward A. Hayman, Squire, Sanders V. Dempsey, Re: American Steel Foundries, NPDES Application No. OH 0011185, OEPA Permit No. S 324\*AD, February 7, 1979.
20. Letter to John A. Difloure, Works Engineering, American Steel Foundries, from Lynn A. Clark, P.E., Section Chief, Ohio EPA, Re: Solid Wastes, Mahoning County, Smith Township, American Steel Foundries, March 13, 1979.
21. Letter to Lynn A. Clark, P.E., Section Chief, Ohio EPA, from Mark A. Cusick, Squire, Sanders V. Dempsey, Re: American Steel Foundries Solid Waste Disposal, April 5, 1979.

22. Letter to Mark Cusik, Squire, Sanders V. Dempsey, from Lynn A. Clark, P.E., Section Chief, Ohio EPA, Re: Solid Waste, Mahoning County, American Steel Foundries, May 10, 1979.
23. Letter to Lynn A. Clark, P.E., Section Chief, Ohio EPA, from Robert E. Burton, Jr., Squire, Sanders V. Dempsey, Re: Proposed Leachate Test Procedure, July 6, 1979.
24. Request for Hearing, Before the Ohio EPA, Amsted, Industries, Inc., American Steel Foundries Division, Alliance Foundry, July 9, 1979.
25. Site Inspection Summary, American Steel Foundries, written by Mark Bergman, Environmental Scientist, Ohio EPA, July 31, 1979.
26. Letter to Amsted Industries, American Steel Foundries Division, from Ralph W. Everett, Chief, Permit and Approval Section, Ohio EPA, Re: Director's Findings and Orders, Case No. 74-WD-417, June 3, 1980.
27. Hearing Examiner's Decision, Before the Ohio EPA, Amstead, Industries, Inc., American Steel Foundries Division, Alliance Foundry, Case No. 79-SW-014, June 11, 1980.
28. N.D. Inspection, Ohio EPA, with Wilbur Borton, Works Engineer, American Steel Foundries, September 23, 1980.
29. Part A Application, American Steel Foundries, with attachments, L.D. Davis, Vice President, June 16, 1981.
30. Letter to RCRA Activities, EPA Region V, from L.D. Davis, Vice President, Amsted Industries, Re: Withdrawal of Part A Hazardous Waste Permit Application for American Steel Foundries, June 25, 1982.
31. Letter to Elizabeth Utley, RCRA Activities, Ohio EPA, from C.A. Ruud, Manager, Safety and Environment, American Steel Foundries, Re: Telephone Conversation with D.E. Meves on October 25, 1982, October 27, 1982.
32. Letter to Catherine McCord, Ohio EPA, from Fred P. Kostka, Chief Patent Attorney, Amsted Industries, Inc., Re: Correspondence Covering the Withdrawal of the Part A Interim Permit for the Alliance Works of American Steel Foundries, November 30, 1984.

33. Environmental Sample Submission Report for American Steel Foundries, Baghouse Dust, Ohio Department of Health, Sanitary Chemistry Section, March 25, 1985.
34. Letter to John Difloure, American Steel Foundries, from Ohio EPA, Re: Split Sampling Effort on February 12, 1985, February 22, 1985.
35. Letter to John Difloure, American Steel Foundries, from Stephen R. Uecke, R.S., Environmental Director, Mahoning County General Health District, Re: American Steel Foundry's Practice of Depositing Industrial Wastes on the Property Located at Heacock Road, April 5, 1985.
36. Letter to C.R. Dixon, Jr., American Steel Foundries, from Catherine A. McCord, Environmental Scientist, Ohio EPA, Re: Summary of Some of the Items at the April 9, 1985 Meeting, April 19, 1985.
37. Engineering Report on Design of Foundry Waste Disposal, Lake Park Road Project, Alliance, Ohio, American Steel Foundries, Report No. 28458-585-274, May 14, 1985.
38. Letter to Catherine A. McCord, Environmental Scientist, Ohio EPA, from Geoffrey K. Barnes, Squire, Sanders V. Dempsey, Re: American Steel Foundries Alliance Works, June 7, 1985.
39. Letter to C.R. Dixon, Jr., American Steel Foundries, from Catherine A. McCord, Environmental Scientist, Ohio EPA, Re: Summary of Findings of Facility Inspection on April 26, 1985, with disposal site map attached, July 9, 1985.
40. Letter to D.A. Walsh, Health Commissioner, Mahoning County Health Department, from Ohio EPA, Re: Results of Inspections Conducted on July 12, 1985, July 17, 1985.
41. Memorandum from C.A. Ruud, American Steel Foundries, Re: Alliance Works, Electric Arc Furnace Dust/Sludge Test Results, July 26, 1985.
42. Letter to Catherine A. McCord, Environmental Scientist, Ohio EPA, from Geoffrey K. Barnes, Squire, Sanders V. Dempsey, Re: American Steel Foundries Alliance Works, August 8, 1985.
43. Sample Locations, August 6 and 7, 1985, American Steel Foundries.



44. Letter to Terry Bradway, American Steel, from Edward F. Conlin, Manager, Tri-State Laboratories, Inc., Re: EP Toxicity Extraction per the Federal Register, Vol. 45, No. 98, May 19, 1980, Book 2, October 4, 1985.
45. Enforcement Referral, Division of Solid and Hazardous Waste Management, American Steel Foundries, October 31, 1985.
46. Potential Hazardous Waste Site Preliminary Assessment, Steel Foundries Disposal Site, Add to CERCLIS, November 20, 1985.
47. Solid Waste Disposal Facility Violation Notice, American Steel Foundries, Inspection done by Mark F. Schmidt, July 25, 1986.
48. Laboratory Report, Four Water Samples for Chemical Analysis, Received September 19, 1985, for American Steel Foundries, October 14, 1985.
49. Environmental Assessment of the American Steel Foundries Lake Park Drive Disposal Site, Alliance, Ohio for American Steel Foundries, Report No. 28458-1185-559-R, February 14, 1986.
50. Industrial User - Pretreatment Baseline Report Form, Amsted Industries, Inc., April 21, 1986.
51. Letter to George Hamper, Chief, USEPA, Region V, from Tom E. Carlisle, Acting Manager, Engineering Section, Ohio EPA, Re: Facility Management Plan for American Steel Foundry, May 16, 1986.
52. Letter to Maynard Teppo, American Colloid Company, from Phil Rhodes, Environmental Engineering II, Ohio EPA, Re: Return of Permit to Install Application for an Air Discharge, July 31, 1986.
53. Metals Analysis Report, American Steel Foundries, Sample ID: (#1) Comingled Sludge 11/11/86, Received November 13, 1986.
54. Letter to Basil G. Constantelos, Director, USEPA, Region V, from Edward J. Brosius, Senior Attorney, Amsted Industries, Inc., Re: Loss of Interim Status Closure Plan Request, April 23, 1987.

55. Letter to C.T. Corporation, Registered Agent for American Steel Foundries, from Basil G. Constantelos, Director, Waste Management Division, USEPA, Re: Information Request, American Steel Foundries - Alliance, Ohio, and Sebring Township, Ohio, April 10, 1987.
56. Letter to USEPA, from L.F. Engel, Vice President, Manufacturing, American Steel Foundries, Re: Information Request, American Steel Foundries - Alliance, Ohio, and Sebring Township, Ohio, May 11, 1987.
57. Complaint by United States of America on behalf of the Administrator of USEPA against Amsted Industries, Inc., American Steel Foundries, Civil Action No. C87-1284A, May 28, 1987.
58. Letter to David E. Statler, American Steel Foundries, from Kevin Bonzo, Environmental Scientist, Ohio EPA, Re: Facility Inspection Findings, September 28, 1987.
59. Laboratory Report, One (1) Water Sample Submitted for Analysis, for American Steel Foundries, Bowser-Morner, Inc., October 5, 1987.
60. Letter to Paul Limbach, American Steel Foundries, from Kevin Bonzo, Environmental Scientist, Ohio EPA, Re: Site Inspection on May 25, 1988, June 14, 1988.
61. Letter to Jim Brossman, Chief, USEPA, Region V, from Timothy P. Krichbaum, Solid and Hazardous Waste Unit, Ohio EPA, Re: Final CME Report Documents for American Steel Foundries and Egbert Corporation, June 21, 1988.
62. Minutes of Meeting, American Steel Foundries, September 8, 1988.
63. Letter to Paul Limbach, American Steel Foundries, from Ohio EPA, Re: Unaddressed Violations at the Production Facility of American Steel Foundries, September 12, 1988.
64. Memorandum from Charles R. Dyas, Jr., Attorney General of Ohio, from Brian Babb, et al., Ohio EPA, Re: American Steel Foundries Administrator Inspection Warrant and Application for Costs, January 8, 1989.

65. Telecopy letter to Greg Kvaal, Project Environmental Engineer, DPRA, from Philip C. Schillawski, Squire, Sanders V. Dempsey, Re: The Proposed Corrective Action Visual Site Inspection of the American Steel Foundries Facility in Mahoning County, Ohio, February 15, 1989.
66. Letter to Edward Brosius, Senior Corporate Attorney, American Steel Foundries, from Greg Kvaal, Project Environmental Engineer, DPRA, Re: Proposed Visual Site Inspection Agenda and Preliminary Information Needs List, February 10, 1989.
67. Determination of Hazardousness, American Steel Foundries, Lake Park Boulevard Disposal Site, Stark County, Ohio, Confidential, February 1989.
68. Letter to Bernie Orenstein, USEPA Region V, from Ann L. Anderson, Technical Director, A.T. Kearney, Re: Preliminary Review for American Steel Foundries and ASF Disposal Facility, March 27, 1989.
69. Sample Report, American Steel Foundries, for Ohio EPA, prepared by Kemron Environmental Services, July 11, 1989.
70. Affidavit on Inspection, June 1989.
71. Facsimile from Charles R. Dyas, Jr., AAG, EES, Attorney General of Ohio, to Victoria Deppisch, Re: Review and Comment Affidavit, June 1989.
72. Letter to Paul Limbach, American Steel Foundries, from Kevin Bonzo, Environmental Scientist, Ohio EPA, Re: RCRA Hazardous Waste Inspections on June 8-9, 1989, July 10, 1989.
73. Interoffice Memorandum from Kevin Bonzo, Ohio EPA, to Chuck Dyas, Attorney General of Ohio, Re: ASF Cost Recovery Information, August 4, 1989.
74. Letter to Paul Limbach, American Steel Foundries, from Kevin Bonzo, Environmental Scientist, Ohio EPA, Re: RCRA Hazardous Waste Inspections on June 30, 1989, with attachments, August 4, 1989.
75. Laboratory Service Request, Browning-Ferris Industries, for American Steel Foundries, by Dean A. James, September 28, 1989.

76. Letter to Paul Limbach, American Steel Foundries, from Kevin Bonzo, Environmental Scientist, Ohio EPA, Re: Amended RCRA Compliance Evaluation for American Steel Foundries' Production Facility located at 1001 East Broadway, Alliance, Ohio, October 11, 1989.
77. Letter to Debby Berg, Ohio EPA, from Philip C. Schillawski, Squire, Sanders V. Dempsey, Re: Response to letter from Kevin Bonzo, Ohio EPA, to Paul Limbach, American Steel Foundries, October 25, 1989.
78. Letter to William E. Muno, Chief, USEPA Region V, from Michael A. Savage, Manager, Ohio EPA, Re: Information concerning a June 30, 1989, Ohio EPA Inspection of American Steel Foundries, Sebring Township Hazardous Waste Disposal Facility, December 5, 1989.
79. Letter to Debbie Berg, Environmental Scientist, Ohio EPA, from C.R. Dixon, Jr., Works Manager, American Steel Foundries, Re: Results of Analysis of Paint Sludge/Oil Dry Mixed Solid Material completed on June 9, 1989, February 2, 1990.
80. Letter to William D. Heestand, Jr., American Steel Foundries, from David O. Budd, R.S., Environmental Scientist, Ohio EPA, Re: Information Requested During Meeting on July 3, 1990 at American Steel Foundries, July 10, 1990.
81. Letter to William D. Heestand, American Steel Foundries, from Ohio EPA, Re: Routine Hazardous Waste Inspection at American Steel Foundries' Production Facility in Alliance, Ohio on July 2-3, 1990, October 19, 1990.
82. Letter to Edward Kitchen, Ohio EPA, from Philip C. Schillawski, Squire, Sanders V. Dempsey, Re: American Steel Foundries Recycle Closure, October 29, 1990.
83. Letter to William D. Heestand, Jr., Safety and Environmental Supervisor, American Steel Foundries, from David O. Budd, R.S., Environmental Scientist, Ohio EPA, Re: RCRA and Solid Waste Compliance Inspection at American Steel Foundries' Alliance Foundry and Land Disposal Facilities, November 29, 1990.

84. Letter to John Watkins, Supervisor, Ohio EPA, from Philip C. Schillawski, Squire, Sanders V. Dempsey, Re: Preliminary Response to David Budd's letter regarding the July Solid Waste Inspections, December 13, 1990.
85. Letter to John Watkins, Supervisor, Ohio EPA, from Philip C. Schillawski, Squire, Sanders V. Dempsey, Re: More Detailed Letter by which ASF is Handling the Materials Presently Considered by Ohio EPA to be Solid Wastes, December 20, 1990.
86. Comprehensive Groundwater Monitoring Evaluation of American Steel Foundries, Ohio EPA, December 21, 1990.
87. General Data Table, Antech Ltd., for American Waste Services, Inc., Re: Waste Characterization; American Steel Foundries; Collected December 17 1990, Report date January 14, 1991.
88. Letter to Thomas E. Crepeau, Manager, Ohio EPA, from C.A. Ruud, Manager, American Steel Foundries, Re: Supplementary Annual Report for 1990 Groundwater Monitoring Information for 1990, February 25, 1991.
89. Letter to William D. Heestand, American Steel Foundries, from Ahmed S. Hawari, Ohio EPA, Re: RCRA Hazardous Waste Inspection of Hazardous Waste Landfill Facility on Lake Park Blvd. on May 7, 1991, June 3, 1991.
90. Letter to Ahmed S. Hawari, Ohio EPA, from William D. Heestand, American Steel Foundries, Re: Response to Letter Dated June 3, 1991 regarding May 7, 1991 inspection of the ASF Landfill, June 24, 1991.
91. Letter to David O. Budd, Environmental Scientist, Ohio EPA, from William D. Heestand, American Steel Foundries, Re: Meeting held on December 10, 1990, July 9, 1991.
92. Memorandum from Mark J. Navarre, Legal, Ohio EPA, to Donald R. Schregardus, Director, Re: Recommended AGO Referral of Amsted Industries, Inc., dba American Steel Foundries, October 7, 1991.
93. Letter to Gordon Lohman, President, Amsted Industries, Inc., from Donald R. Schregardus, Director, Ohio EPA, Re: Referral of Amsted Industries, Inc. to Ohio Attorney General's Office

for Violations of the Hazardous and Solid Waste Laws of the State of Ohio, November 1, 1991.

94. Letter to the Director, Ohio EPA, from W.D. Heestand, Safety and Environmental Supervisor, American Steel Foundries, Re: Request for Permission to Excavate A Single Trench Approximately 20' Deep In order to Determine the Extent of Layering of Materials at Mahoning County Landfill, January 3, 1992.
95. Letter to the Director, Ohio EPA, from D.J. Marlborough, Plant Manager, American Steel Foundries, Re: Request for Permission to Excavate A Single Trench Approximately 20' Deep In order to Determine the Extent of Layering of Materials at the Sebring Landfill, February 14, 1992.
96. Letter to D.J. Marlborough, Plant Manager, American Steel Foundries, from William L. Black, Environmental Specialist 2, Ohio EPA, Re: Authorization to Excavate, February 18, 1992.
97. Letter to Barbara Bonds, Ohio EPA, from D.J. Marlborough, Plant Manager, American Steel Foundries, Re: Request for Status Report of ASF Letter to Mr. David Budd, Ohio EPA, dated July 9, 1991, March 30, 1992.
98. Letter to Edward J. Brosius, Assistant General Counsel and Assistant Secretary, Amsted Industries, Inc., from James O. Payne, Jr., Lori A. Massey, Assistant Attorneys General, Re: Draft Consent Order to be Utilized at Meeting on April 24, 1992, April 23, 1992.
99. Interoffice Communication from Bill Black, to Bruce McCoy, Re: American Steel Foundries, May 11, 1992.
100. Letter to John B. Palmer, Ohio EPA, from Richard L. Lewis, Squire, Sanders, and Dempsey, Re: November 26 and 27, 1991 inspections, February 14, 1992.
101. Letter to Troy Schultz, Ohio Department of Commerce, Div. of State Fire Marshall, from William D. Heestand, American Steel Foundries, Re: UST Corrective Action, May 28, 1992.
102. Letter to Van Carson, Squires, Sanders, and Dempsey, from Gregory L. Sukys, U.S. Department of Justice, Environment

and Natural Resources Div., Re: Consent Decree, December 10, 1992.

103. Draft Consent Order, State of Ohio vs. American Steel Foundries, No date.
104. Analytical Data Sheets, from Wadsworth/Alert Laboratories, Inc., Re: Water from trough used to soak casting covers at paint booth, July 6, 1990.
105. Analytical Data Sheets, from Wadsworth/Alert Laboratories, Inc., Re: Sludge - Paint/oil dry waste, July 17, 1991.
106. Summary of Waste Generation at ASF - Alliance, no date.
107. List of Air Permits, no date.
108. Plant Map, Alliance Works, no date.
109. Plot Plan, Alliance Plant, February 24, 1988.
110. Landfill Map, January 8, 1992.
111. Flowchart, Waste Material Flows, Melted Metals Dept., American Steel Foundries, May 29, 1990.
112. Flowchart, Waste Material Flows, Molding Department, American Steel Foundries, May 29, 1990.
113. Flowchart, Waste Material Flows, Core Room, American Steel Foundries, May 29, 1990.
114. Flowchart, Waste Material Flows, Yard Department, American Steel Foundries, May 29, 1990.
115. Flowchart, Waste Material Flows, B & E Department, American Steel Foundries, May 29, 1990.
116. Flowchart, Waste Material Flows, Wge Department, American Steel Foundries, May 29, 1990.
117. Flowchart, Waste Material Flows, Pattern Shop, American Steel Foundries, May 29, 1990.
118. Flowchart, Waste Material Flows, C & F Department, American Steel Foundries, May 29, 1990.

119. Solid Waste Flow Diagram, American Steel Foundries, December 21, 1990.
120. Flowchart of Process Water and Recirculation Systems, American Steel Foundries, March 13, 1990.
121. Logbook, A.T. Kearney, Inc., Re: Visual Site Inspection of American Steel Foundries, January 13 and 14, 1993.
122. Groundwater Quality Assessment Plan for Sebring Facility, American Steel Foundries, Alliance, Ohio, prepared by RMT, Inc., March 1992.
123. Letter to Ohio EPA, Wastewater Pollution Control, from W.D. Heestand, American Steel Foundries, Re: enclosed application for an individual stormwater discharge permit, September 10, 1992.
124. The Weather Almanac, Fifth Edition, James A. Ruffner and Frank E. Bair, editors, Gale Research Company, 1987.
125. Letter to State Fire Marshal, from C. R. Dixon, American Steel Foundries, Re: Notification for Underground Storage Tanks, April 29, 1986.
126. Letter to Mr. C. A. Ruud, American Steel Foundries, from C. R. Dixon, American Steel Foundries, Re: Underground storage tank recommendations, August 13, 1988.
127. Final Report, Soil Boring Study, American Steel Foundries, Alliance, Ohio, Remcor, Inc., July 25, 1990.
128. Letter Report to Mr. William D. Heestand, American Steel Foundries, from Neil K. Cope, Remcor, Inc., Re: Underground storage tank activities, April 26, 1991.
129. UST Closure Report to Mr. William Heestand, American Steel Foundries, from Ben R. McClellan, R & R International Inc., June 27, 1991.
130. Letter from William D. Heestand, American Steel Foundries, to State Fire Marshal, Re: 1992 annual tank registration, May 8, 1992.



**ATTACHMENT A**

**VISUAL SITE INSPECTION SUMMARY  
AND  
PHOTOGRAPHIC LOG**

**VISUAL SITE INSPECTION SUMMARY  
AMERICAN STEEL FOUNDRIES  
ALLIANCE, OHIO**

Date: January 13 and 14, 1993

Facility

Representatives: Chuck Ruud  
Terry Bradway

Inspection Team: Jeff Surfus, A.T. Kearney, Inc.  
John Koehnen, A.T. Kearney, Inc.

Weather

Conditions: Snow flurries, 30's

Summary of  
Activities:

The visual site inspection (VSI) for the ASF facility began at 1:00 PM on Wednesday, January 13, 1993. A meeting with the facility representatives was held between 1:00 and 5:00 PM. The purpose of the inspection was discussed initially, and subsequent discussions focused on the site history, site processes, past and current waste management practices, and solid waste management units (SWMUs). A significant amount of information requested in the VSI Notification Letter had been gathered and was presented to the team.

At 8:30 AM on Thursday, January 14, 1993, the team continued meeting with facility representatives, discussing the two Consent Orders and underground storage tanks at the facility. At approximately 9:00 AM, a walk-through inspection of the foundry facility was conducted to identify the SWMUs and potential areas of concern (AOCs) previously found during the file review and discussed during the meeting. The potential for release of hazardous constituents to the environment was visually assessed during this inspection. Photographs were taken by John Koehnen, with permission by ASF.

After lunch, at 1:05 PM, the ASF Disposal Facility (SWMU 1) was inspected and photographed. A brief exit meeting was held at 1:45 PM to summarize additional information requirements that could not be obtained during the VSI. The inspection team left the facility at 2:30 PM.



Photograph No.: 1  
Date: January 14, 1993

Direction: SW

Description: Overview of Pattern Shop Baghouse (SWMU 2).



Photograph No.: 2  
Date: January 14, 1993

Direction: WSW

Description: Close-up view of Container Storage Area (SWMU 7) located within the flammable materials storage building.



Photograph No.: 3  
Date: January 14, 1993

Direction: E

Description: Overview (180 degrees of photo 2) of the remainder of the flammable materials storage building. 55-gallon drums contain products used in the processes at the facility.





Photograph No.: 4  
Date: January 14, 1993

Direction: E

Description: View of Satellite Accumulation Area (SWMU 3) in the fork truck maintenance garage. Drums are located over concrete, within overpacks. The drums are used for oil and solvent collection.



Photograph No.: 5  
Date: January 14, 1993

Direction: ESE

Description: Close-up view of a solvent Parts Cleaner (SWMU 4) located within the fork truck maintenance building. The unit is located indoors over concrete and contains mineral spirits.





Photograph No.: 6  
Date: January 14, 1993

Direction: WNW

Description: View of exhaust filtration filters associated with the core wash machine Spray Booth Filter System (SWMU 5) located within the core room of the main production building.



Photograph No.: 7  
Date: January 14, 1993

Direction: W

Description: Close-up view of a solvent Parts Cleaner (SWMU 4) located within the main building at the grinder repair/maintenance location.



Photograph No.: 8  
Date: January 14, 1993

Direction: WSW

Description: View of a solvent Parts Cleaner (SWMU 4) located in the south tool room.





Photograph No.: 9  
Date: January 14, 1993

Direction: WSW

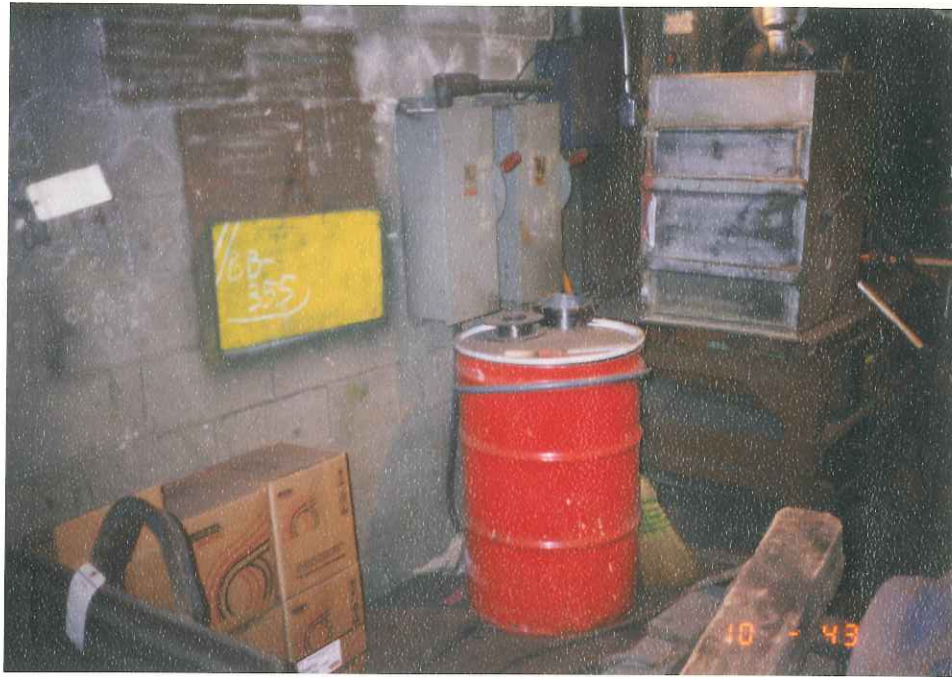
Description: Overview of a Refuse Dumpster (SWMU 13) outside the facility production building.



Photograph No.: 10  
Date: January 14, 1993

Direction: N

Description: Overview of Baghouses (SWMU 2) for the blast and rapper operations within the main production building.



Photograph No.: 11  
Date: January 14, 1993

Direction: W

Description: Close-up view of the wire-feed welder, smoke and dust collector. Note the drum, the Barium Dust Storage Area (SWMU 12), which is used for the collection and storage of dust residues from the collector unit. The collector unit is located adjacent to the drum.



Photograph No.: 12  
Date: January 14, 1993

Direction: SW

Description: Close-up view of paint Spray Booth Filter System (SWMU 5) filters. An identical set of filters is located on the opposite wall.





Photograph No.: 13  
Date: January 14, 1993

Direction: SW

Description: Overview of Paint Waste and Wood Roll-off Box (SWMU 6).  
Scrap metal to be reused is piled beside the unit.





Photograph No.: 14  
Date: January 14, 1993

Direction: E

Description: View of the Baghouse Waste Storage Area (SWMU 11) containing baghouse dust collector bags (full). The bags are set on the ground surface and labelled with origin. This is the former location of paint waste storage.



Photograph No.: 15  
Date: January 14, 1993

Direction: SW

Description: Close-up view of a Satellite Accumulation Area (SWMU 3) within the B&E building, used for oil and solvent collection.



Photograph No.: 16  
Date: January 14, 1993

Direction: NE

Description: Close-up view of a solvent Parts Cleaner (SWMU 4) located within the B&E building.





Photograph No.: 17  
Date: August 6, 1992

Direction: SE

Description: View of clarifier unit associated with facility Wastewater Treatment System (SWMU 9).



Photograph No.: 18  
Date: January 14, 1993

Directions: S

Description: Close-up view of the filter press used for the dewatering of wastewater treatment sludges, part of the Wastewater Treatment System (SWMU 9).



Photograph No.: 19  
Date: January 14, 1993

Direction: SE

Description: View of two 3000-gallon sludge holding tanks associated with the Wastewater Treatment System (SWMU 9).





Photograph No.: 20  
Date: January 14, 1993

Direction: SE

Description: Close-up view of roll off container (6 cubic yard capacity) used for the storage of dried sludge after pressing, part of the Wastewater Treatment System (SWMU 9).



Photograph No.: 21  
Date: January 14, 1993

Direction: SE

Description: View of discharge point for treated wastewater from the  
Wastewater Treatment System (SWMU 9) to the city POTW.





Photograph No.: 22  
Date: January 14, 1993

Direction: N

Description: Overview of the Former East Solid Waste Disposal Area (SWMU 14), now used for scrap steel storage.



Photograph No.: 23  
Date: January 14, 1993

Direction: S

Description: View of the Former Used Oil Storage Area (SWMU 15), now  
used for scrap steel storage.



Photograph No.: 24  
Date: January 14, 1993

Direction: E

Description: Overview of the Electric Arc Furnace (EAF) Baghouse (SWMU 8).







Photograph No.: 26  
Date: January 14, 1993

Direction: N

Description: Overview of waste piles at the ASF Disposal Facility (SWMU 1), separated by material content.



Photograph No.: 27  
Date: January 14, 1993

Direction: E

Description: Overview of the former pond located at the ASF Disposal Facility (SWMU 1) landfill area. This unit no longer contains standing water on a regular basis.



Photograph No.: 28  
Date: January 14, 1993

Direction: S

Description: View of the separation hopper and waste piles at the ASF Disposal Facility (SWMU 1) landfill.





Photograph No.: 29  
Date: January 14, 1993

Direction: SE

Description: Overview of former pond and additional ASF Disposal Facility (SWMU 1) land.





Photograph No.: 30  
Date: January 14, 1993

Directions: W

Description: View of groundwater monitoring wells located at the property boundaries of the ASF Disposal Facility (SWMU 1).



Photograph No.: 31  
Date: January 14, 1993

Direction: S

Description: Overview of the Former East Solid Waste Storage Area (SWMU 14), now used for scrap steel storage.



Photograph No.: 32  
Date: January 14, 1993

Direction: S

Description: Close-up view of a facility storm drain associated with the Stormwater Sewer System (SWMU 10). The drain is located adjacent to the production and office areas.

**ATTACHMENT B**

**VISUAL SITE INSPECTION FIELD NOTES**

Name .....

Address .....

Phone .....

Projects

ASF  
Jeff Sufin

This book is published on a fine 50% cotton-content ledger paper,  
specially treated for maximum archival service, and protected by a  
water resistant surface sizing.



Publishing Co., Inc.

Meredith, N.H. 03253



Projects (continued)

1/13/93

1:00 - Arrived at facility  
Cloudy, windy, cold -30°

met with:  
Chuck Rind  
Terry Broadway

General info

Has been a steel foundry  
since 1890's

- 1902. American Steel  
began ownership

- (recl. - sand steel foundry  
moisture added to solid  
silica sand)

Not chemically bonded  
- 35-40 acres (38.915 acres)

~1/2 of property reclaimed from  
residential

~20 acres in address original plot

## Process

Buy scrap steel from selected scrap suppliers

### ① Remelt steel

4 Types of steel - As required specs

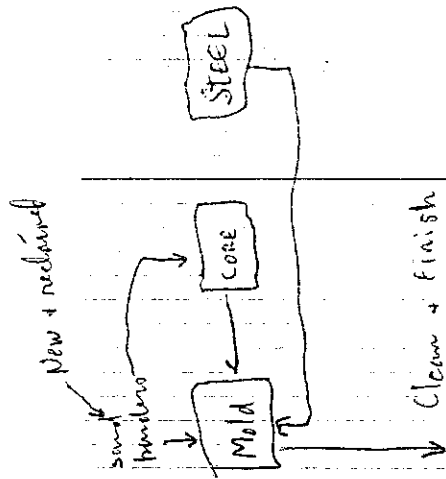
② Pour hot steel into green sand molds.

③ After solidified, shake out sand

④ Process - clean, deep grind + finish the product

And address as they:

- shot blast
- heat treated
- chipping + grinding
- Machining
- some products are painted



90% of sand is reclaimed

New sands used on facing for desired finish

Manufacture products for railroad industry  
 Complex  
 frames  
 other metal parts

Low carbon, low alloy steel.  
 S1C 3325

Silica sand, some chromite sand (no chrom)



Very little assembly

Assembly + machining

- Process Machining 2 areas

- Maintenance Machine Shop

- Pattern Machining -

wood  
metal  
plastic

Cleaning and Finishing Dept

- Heat Treating

Normalizing

Normalizing + Tempering (700-1100°)

Normalizing Quench + Temper  
add water

1600°

Heating + air cooling

Heat to 700-1100°

Temper - Quench is

= Shot blast cleaning

steel beads thrown under pressure  
against surfaces of castings

- Chipping hammer - takes off  
projections

by reading  
by angles - Check if corners (holes) etc  
are proper size

Welding repair

Painting - 1 paint booth

Assembly

Shipping Dept  
Truck

approximately  
90% +

Chem Lab

Spectrometer since 1969  
Petroleum chemistry of steel

Prior to 69. W.D. chemistry

Engine Room - Power house

130 ton electric arc furnace

350 = 400 tons steel / day

Purchase electricity, do not generate.

heating of buildings  
compressed air for Egypt

---

Sand Washer

Sand is mixed with water,  
removing eldags, dried +

removed

redaway sand since 1940's.

15 bins sand/hr

6

grains of sand break down creating  
dunes, thus new sand is  
needed.

Logging Station

Resins within mold are  
sledged or hammered off.

Maintenance Area Building 3 Egypt

Carpenter Shop

Garage for mobile eqpt. (internal)

Pattern storage building - down  
the street

Storage, resorts, + shipping Bldg.

2 oil tanks for backing fuel.

Scrap steel and outroll  
salvageable metals

Some outdoor product storage

## Waste Management

Chart showing all  
\* what disposed \* recycled  
wastes generated

### Cone Klean

Chart: floor asked for copy  
overspray of cones - sand/water  
not silica - real fine sand  
grease - solid waste disposal  
commercial lumber

Floor sweeping, overspray fines →  
American Waste  
landfill in Canton

BF1 takes other general refuse  
Willow Creek LF, Alliance

Used oil drums → Safety Klean  
Every oil that comes out of plant  
is designated per source.

Safety Klean analyzes oil. All  
oil goes out as H W



## Platterson Shop

Flour shant

hardwood, dried paint, scrap with bare etc

SW LF

used oil sand as core

## Molding Dept

Dust in molding collected in

backhouses

sped refractories not to ASF LF

## Classifier

Sludge → ASF LF for closure for lining

Most water from hand washer

1 wet dust collector

60% of water recycled

Melted Metals Dept

Flour shant

CAF Dust → inverte for chemical

stabilization

60%

C + F Dept

Flow chart

Paint booth waste - filters, oil dry from

overaging

Not H W

Paint Booth

Dry filter w/ air period

Change out filters every

Paint booth cleaned once week

clean floor, spilled paint, over dry

Paint in B F dumpsters

Dirt collectors

bags

all collected in plastic

Amesbury Plastic Mgmt

Maintenance Dept

Phenolic Resin Danks - holds binder

for cores

Once a yr cleaned with NaOH

reused annually - for last

4 years

All cooling water is non-contact  
except quench and flame hardener  
water

Landfill  
Chart

Hazardous Waste Storage Area

Building set up for flammables

Oils for recycling  
Product oils  
Injunct wastes

3 waste accumulation areas  
strong solvents & oils

CAF Report

Collected in baghouse, pulled  
in via clean fan. Prepared in  
20 yd<sup>3</sup> hopper mixed with  
water to eliminate  
dust.



Stopped spending amt with

May 1987 - started collecting dust  
as HW - no longer send to ASF LT

12/87 - started sending EAF to  
Horsehead Chem. - recover  
metals. Non regulated as  
TSD for Chem. - High Waste  
so couldn't take ASF EAF

1/88 - Chem Waste - Alabama Center  
Pb. Wayne

1/89 - Euvrite too much  
fragile emission from dry waste  
EAF

3/89 - Back to work

4/90 - Developed wet process  
(glue in water) - back to  
Euvrite.

### Landfill

Bought in 1966

- W will provide copy of consent decree and record (after late 1971) inspection activity.

- Initially all solid waste + slurry mixed with EAF.

- 500,000 - 600,000 tons estimated in clean closure

Clean closure plan due 2/12

4/16/92 Sent in WQAS200 plan  
Sent in to DEPA + USEPA

"Single closure" (1992)  
- wanted to get chromite sand out of the LF.  
Close LF at same time  
- Cost was too prohibitive

EAF dust 10% of LF waste

GW: 22 wells <sup>will be</sup> ~~to be~~ installed  
at high + low depths

4 installed in 1985, <sup>included as</sup>  
<sup>part of 22</sup>

5 installed in 1991

sampled 3 times in 1985, not  
since.

found no longer exists

storing various sand material  
from ponding for future closure.

To be used as alternate cover  
material. <sup>recessing</sup>  
takes place - separation  
of various sizes of sand.

not clean closure. <sup>insufficient</sup>  
plan on 2/12.

Permits

Air permits for boiler (registered)  
spray booth, oil-burners, etc.  
weld "part" booth, CAF Furnace  
booths, other booths,  
sand cooler booths, etc.

- All baggage dust to LF,

- Discharge permit → air sewer  
permit from Alliance.

July 88. spend violations  
Changed process added chlorine  
disinfectant to reduce.

Occasional oil + grease in feedwater

- Occasional zinc from flame  
hardening.

Plan on total recycling. zero  
discharge

## Environmental

No wells  
Experimental well isolated to  
determine if they could use  
well water. Not enough  
capacity. Closed & capped.  
Date 70's

- Alluvial water - Mahoning R

- Walbridge Reservoir

- Deer Creek Reservoir

Some wells also

- Nearest surface water  
Mahoning River 1/2 mile North

LF - nearest SF adjacent Secura  
Road - Discharge point from  
trailer park (wastewater)

Unnamed tributary ~ 500 ft West  
of LF → to Mahoning River



Surrounding land - industrial region  
Engineering mill foundry, used  
to make cranes (Primarily welded in ground)  
- South Alliance Machine cranes  
- East residential in general  
- North rail yards

LF Rural area

Trailer park to east  
Area is on wells

Water well survey done in  
85 will provide

Alliance - 25,000 people

Pullman estimate

15:15 - Completed finished writing

Jeff Carlson

1/14/93

8:30 Arrived at site Cold, -20°  
icy

Met with Jerry Bradway  
Chuck Rouse

- Presented flow diagrams
- List of permits
- Zoning map

- Some air sources on list have applications into OSHA, awaiting action

- Small plant map given to us.

Landfill map

Property map of LF

including Z.I. areas added in 1988.

- Draft consent order with Atty Gen. for zoning area

EPA inspections per EE + EA requested

in violations at foundry -

- drum storage

- HAA violations

- East end of property - sand + materials stored prior to sand washer with spent cores - considered solid waste (cores) - consider disposal facilities by OSHA

- 89 - Barium dust from well frame dust collector stored over 90 days  
Stored in drum adjacent to bayhouse

600 lbs generated 91 950 912

Now mixed with ore furnace dust

Isotellite vacuum area - every 90 days emptied at EAF hopper.

1099 - Required to improve action  
oil drum storage bag waste  
solid waste area a dust  
spiral storage



- Will remove solid waste at east end
- ~~solid~~ Subbed clean up plan oil drum storage area
- Paint storage area - test results.
- solid waste EPA wants formal closure plan
- Storage room - drum of dust over 90 days.

- Poly packs SAA & outside removed from service

- Draft agreed order from Abby for first received not agreed to by ASF

- Will provide copy of draft
- analytical with paint storage oil drum

### Underground Storage Tanks

- 1 in service - improper
- 3 closed in place

Several were pulled  
- I just found. Think it's a task  
post to checking into it now  
excavation on Monday.

Will provide all documentation  
on USTs.

I closed in place had a release  
- site investigation done  
Release agent tank

Stormwater sewer system on  
plant in 7 point minor  
Permit application sent  
Requested copy.

2.8.5 tons/wh of EAF generated  
per week - full production

7:05 - Began inspection of  
foundry area

Wood Pattern Shop

- Sandust generated  
Cyclone collector

Bag below

(Photo) Baghouse outside

Collection bag. fiber enclosed  
in tin body.

Raw Material Storage Area

Stored inside yellow line in  
E. W corner of lobby

Used motor oil

Used anti freeze

Used coolant (water hose)

Soil cuttings

Non purpose grease + water

Soil + diesel fuel

used oil

Mixture oil + water

Safety Kleen solvent  
Hi Temp Grease  
Coolant: water + oil

17 drums stored in area on pallets

Concrete floor

Remainder of bldg used for drummed  
product storage.

Entire bldg is bermed - 6"

Maintenance Garage (forklift)

Satellite Accum. Area for petroleum  
based products (used oil)  
Water based products (antifreeze)

2 drums - each in a poly overpack

Sealed funnel on top of each

Paint cleaner in garage  
Arrived by Safely Klen  
- ~50 yd.  
Tid closed, concrete floor

### Cave Room

#### Cave Wash Spray Bottle

Water + refractory sand, sprayed  
on cores prior to use.

Continuous recycling

Dry filters along g. side → air source  
2 1/2 filters along side wall - from  
drums are through

More changed of filters or 2 made  
American waste

Showered us core type full of broken  
cores. Broken manually & then  
crushed prior to sand working.

### Molding Room (Fondry)

## E A Furnace

Scrap steel melted. Poured into 30 ton  
ladles.

## Electrical Grinding Repair Area SFF Port

Worker

Safety Kleen - ~10 gallon unit  
Closed lid, concrete

Waste electrical paint from grinders

## North Tool Room (C & F) Phil Workin

~10 gal

closed lid, concrete floor

Hammers, grinders, cylinders, washers  
in here

Safety Kleen

## Wrecking Area

5 men

generate waste, coolant. Periodically  
change over. Bring drum over, fill  
and take to liquid waste storage.  
Water based coolant.



Hot Isoline Hardening Units  
Water is applied (sprayed) over  
part after flame hardening. Water  
is discharged to sanitary sewer.

South Tool Room (C & F) Parts Washer

~ 20 gal unit  
Closed lid, concrete floor  
Cleaners & tools - same as north tool

New Bldg. SAA

Barium dust arranged in drum  
none at this time in drum.  
Industry, closed lid  
Barium dust from wire fed welder

New Bldg Machine Shop Parts Cleaner

~ 15 gal. Lid open  
Concrete floor  
Various cutting heads, etc cleaned  
Safety Klean

New Bldg Paint Booth

Automated - parts go through in  
line + black paint is applied.  
Water based paint

Hiltonson built walls - bin  
is forced through from one  
wall to another.

Insulation changed periodically.

Sent to BFI.

Analysed - data requested



Floor spillage scraped up - put  
in hopper. Sent to BFI.

### Paint Waste - Wood Hopper

Receives paint waste (floor sweepings  
filters) and pallets.

### Household Waste Storage Area

Various bags stored on pallets  
from various businesses  
- Unapproved.

Area where paint wastes were  
stored on ground - part of closure  
- 100 bags stored now.

### B&E Maintenance Dept SAA

2 55 gal drums in overpacks  
on concrete fl.

Pellets - & water based products

B&E Electrical Shop Pulp Cleaner

~30 gal.  
had closed console fl.  
Various electrical parts cleared

B&E Maintenance Shop Pulp Cleaner

55-gall.  
Closed indoor  
Various parts cleaned during maintenance

B&E Pipefitting Shop Pulp Cleaner

~30 gal.  
indoor closed lid  
Various piping cleared

Safely Klean began ~1989

Wastewater Treatment Process

Clarifier - 100,000 gallon upgrad  
unit. ~~None~~ since 1940's.

Alum + polymer to stimulate separation  
of solids.

Receives water from sand washer.  
Solids settle to bottom,  
solids  
pumped up to filter press.

2-beds prior to filter press - 3000  
gal. each receiving solid from  
clarifier.

Sid out of bottom of tank, mixed  
with polymer, pumped back to  
filter press unit.

Out of press 60-70% solids

Second phase from press → clarifier

Sludge from press pumped into 6  
cubic yard rolloffs lined with plastics

200 tons/wk generated (~80-90 gal.)

Water from clarifier - Recycle  
or sludge (~30-40%) treated w/

chlorine dioxide to reduce phend  
concentrations.  
60-70% recycled back to sand  
washer (not treated)

Discharge point to sewer in  
small shed (Weir bldg) adjacent  
to clarifier. Samples collected here.

East SW storage area  
elevated area on east side  
of plant.

Will run in, through area  
paved.  
Grass overgrown over wall  
will be removed per  
current order.

Former old Drum Storage Area

Former area where drums  
were always put.  
Chlorination will be

clone per convert order,  
show various metal grids  
average

EAF Part Hoppers

Levens with EAF dust from  
hoppers

Water + glutin added to  
dust in various hoppers.

covered 20 yd<sup>3</sup> hopper.

Powerhouse SAA

2 drums in poly over-packs  
contain used hydraulic oil.  
hubs, connect

Powerhouse SAA

30 gal.  
closed lid, indoors  
Various parts cleaning  
Safety Klean

1145 - Concluded foundry inspection  
- lunch

1105 - Arrived at LF

Distilled off northern  
portion of LF for used  
as staging area for material  
for closure.

Mudgate pile used to blend  
with sand to make clay comp

Large pile used to fill  
to grade

Medium pile clay sand  
mixture - either part of  
top or general fill

- Fine pile: for use in clay  
exp. with chrome sand  
pile. Chrome will  
be separated with  
Chrome to plant for reuse  
Chrom. sand to be used for  
exp.

Some slaying will be put in  
hole.

Concrete <sup>from</sup> ~~from~~ <sup>used for</sup> separation  
of various parts of solution

Former sand: now or is gone  
by solution



Drunk along north side  
reaches runoff and goes to  
western position where it  
infiltrates.

Examined Insider park observed at  
top of hill on north side.

Slag skulls from slag pots in  
piles.

Spent minutes looking around as  
what the well site is called.

Observed several of the current  
wells.

1:45 P.M. Close-out meeting

Received copies of:

1986 Env. Assessment

- Permit for dry mine and dewater
- Water from point brook and ditches
- Draft Consent Order (Wiley area) - possibly
- City Report

- Consent Decree provided

Closure for area underneath KAF  
response to be conducted per  
consent decree.

Closure plan not yet submitted.

- Call Jerry per info requested  
Ext 288 or 286

Rec'd waste analytical requested.

2:30 - left site

Name JOHN KOEHNEN  
A.T. KEARNEY  
Address ONE LAGOON DR SUTER  
REDWOOD CITY CA 94065  
Phone (415) 595-4300

Projects

AMERICAN STEEL  
FOUNDRY &

AMERICAN STEEL  
DISPOSAL FACILITY

This book is published on a fine 50% cotton-content ledger paper, specially treated for maximum archival service, and protected by a water resistant surface sizing.



Publishing Co., Inc.

Meredith, N.H. 03253

1-13-12

001

1300 ARRIVE AT ASF  
SITE, MEETING WITH

CHARLES & RUUD

PERSONNEL:

J. KOENEN

J. SURFUS

WEATHER COOL

OVERCAST, SNOWY  
~20°

1-13-93

DL

002

1307 START PRE-VSI  
MEETING

FACILITY STARTED IN 1902  
AS ASF

- PRIOR OP AS FOUNDRY  
ASF IS GREEN SAND STEEL  
FOUNDRY (WET SAND)  
DEV 1908 BY ASF

- FAC  $\approx$  40 ACRES (38.9)  
- LANDFILL  $\approx$  14.7 ACRES

1-13-

JK

003

- 20 ACRES OPEN LAND ORIG
- 219 ACRES RES

✓  
Proc

- SCRAP STEEL FROM SUP.
- REMELTED AND CONT TO  
RR SPEC
- POURED 30 TONS AT TIME  
INTO GREEN SAND MOLD
- SHAKE OUT SAND
- MAT CLEANED, GROUND  
WEDED, ETC.
- [MOLDS REUSED, SAND REEL.]

1-13-73

JK

004

- ALL RR PRODUCTS

LOW CARBON / LOW ALLOW  
STEEL CASINGS

33/25

- MINIMAL ASSEMBLY / PAINTING

[SIDERAMES, BOLLERS, YOKE  
COUPLERS, CENTRATES

1335 MEET w/PLANT

MANAGER & BRIEFLY

DISCUSS PA/UST PROCESS  
AND OPERATIONS.



1-13-72

SV

005

- MACHINE SHOP FOR MAINT  
- MACHINING ON PRODUCTS AT  
SOURCE

- PATTERN MACHINING AREA  
(WOOD, METAL, PLASTIC)

- HEAT TREATING (CLEAN &  
FINISHED)

• NORMALIZING & TEMPER

N - HEAT TO 1600° & AIR  
COOL FOR GRADE B

T - N & REHEAT TO  
7-1100° & AIR COOL

N & QUENCH - HEAT &  
WATER COOL

1-13-3

JK

006

1945

SHOT BLAST  $\Rightarrow$  HEAT TREAT

$\Rightarrow$  BLAST  $\Rightarrow$  CHIP, GRIND

$\Rightarrow$  APPLICATION GUAAGES

$\Rightarrow$  WELD REPAIR & MACH

(IF APPLICABLE)

1953 PAINTING (1 BOOTH)

- ONLY PAINTED FPOD ARE

SIDENWALLS & CASTINGS  
FRAMES

\* CHEM LAB FOR TESTING  
OF METALS BY SPECT.  
ROMETER

\* FORMER (<1969) BY

WET CHEM METHODS

1-13-93

JV

007

1 - 30 TON EAF

350-400 TONS/DAY @  
PRESENT LEVEL

- AIR COMPRESSORS &  
OTHER EQUIP USE

ELECTRICITY (BIGGEST  
BILL)

- W

- GREEN SAND REUSED &  
RECYCLED

2 OIL TANKS @ NE  
CORNER OF SITE

1-13-93

JV

008

1423 CONTINGENT MEETING

CHROMITE SAND USED TO

ALLOW FOR A QUICKER

COOLING - JOINTS TO

AVOID "HOT TEARS"

USED OIL NOT AS HAZ WASTE

(D001) TO SAFETY-KLEEN

- KNOWLEDGE CURRENTLY USED  
TO IND. MONST. PAST BY  
TESTING

- SAFETY KLEEN WILL TEST  
OIL FOR HAZ.

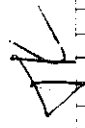
1-13-93

IX

009

- SLUDGE TO LANDFILL FOR STORAGE UNTIL CLOSURE AND THEN USED FOR LINER
- MIXED W/ SAND @ 30/70 RATION WILL GIVE AN APPROX  $10^{-7}$  PERMEABILITY.
- 1/4/91 PRE-INSPECTION MEETING CONTINUING
- EAT TO ENVIRTE FOR STABILIZATION & DISPOSAL AT SAN LANDFILL

1-13-93



010

- PAINT BOOTH

- DRY FILTER w/ EMISSIONS

PERMIT

- CLEANED ABOUT 1/WEEK

- OIL DRY / PAINT / OVERSPRAY  
CLEANED UP



MAINT

- PHENOLIC RESIN

NA OF CUTS, RESINS

0-7 DRUMS IN USE

SINCE FOR FORTY YEARS

AND WILL CONTINUE

TO BE USED

1-12-13 IV OIL

1505 PR & DRINK BREAK

1515 RETURN FOR CONT. OF

PRE MEETING

~ LIQUID

HAZ WASTE STORAGE AREA

IN BUDG SET UP AS

FLAMMABLE BUDG.

5 1/2 OF POLE BARN BUDG.

- SAT ACCUM AREAS (39)

- FORMER - OUTDOORS

- OLD - ON GROUND

- LATER IN OVERPACKS

- NEW - INDOORS IN  
OVERPACKS



1-13-93



012

LANDFILL

PURC 1966-67

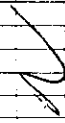
USED FOR DISP OF EAF

AND OTHER MISC FOUNDRY

MATERIALS UP TO 1987

(SOLID WASTE (DISPOSAL))

- SLUDGES (ca 80% H<sub>2</sub>O / 20% S.S.)



QUANTITY  $\approx$  500-600,000 TONS

$\approx$  800 - 885,000 TONS

NEWS  $\approx$  22 AT COMP.

NOW @ 9 WEIRS

4  $\approx$  1985

5  $\approx$  1991

1-13-93

JK

013

POND #2 IS NOT #  
CURRENTLY FILLED. THE  
POND IS EMPTY & WILL  
BE FILLED IN UNDER THE  
PROPOSED CLOSURE PLAN

### PERMITTING

- AIR (DAB HOUSES, EMISSIONS)
  - BOILER - neg.
  - OIL TANKS
  - CORE WASH BOOTH (DAB FLOT)
  - ELECT ARC FURN
  - SAND COOLER (DAB HOUSE)
  - SAND SEPARATOR (LABORATORY)
  - PAINT BOOTH
- WATER (TO CITY)

1-13-93

OK

014

- 1988 PHENOL EXCEEDENCES  
PERMIT CHANGES
- CHLORINE DIOXIDE USED TO  
REDUCE PHENOL LEVELS  
PRIOR TO EXIT

## GEN INFO

### NEWS

- EXPERIMENTAL WELL @  
NEW BODS SITE TO CL  
ON CAPACITY FOR USE.
- AREA @ ASF PLANT IS  
BOTH INDUSTRIAL & RES-  
IDENTIAL
- ASF DISP. MOSTLY RURAL  
W/ TRAILER PK TO EAST

1-13-93

JK

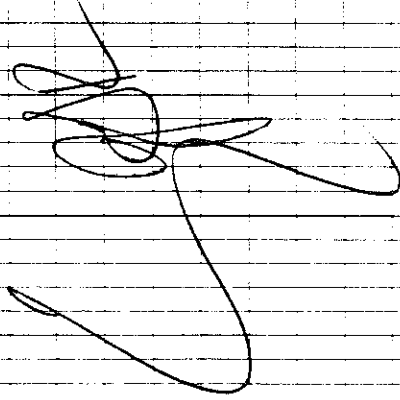
015

CITY OF ALBUQUERQUE - \$25,000

1720 COMPLETE PRE-VISIT  
MTG, DISCUSS AGENDA

FOR TO MORROW'S VISIT

1725 LEAVE SITE FOR  
DRY



12/14-93 JK AM-STEEL O/B

~~DAY 2~~ \*

0830 ARRIVE AT  
AM STEEL SITE.

0835 MEET W/ T. BRADWAY

& COLLECT SOME MORE  
INFO ON PLANT/FAC  
OPERATIONS

- BARUM DUST FROM WELD  
DUST. ~ 600 lbs 1991  
450 lbs 1992

- NOW MIXED w/ EAF DUST  
AND SHIPPED TO ENVIROTEC

1-14-93 DV AM-STEEL 017

# - CONSENT ORDER w/ 6/10

- OIL STORAGE
- PAINT STORAGE
- STORAGE ROOM
- PUMPACKS

• ASF DOES NOT INTEND TO ACCEPT THE CONDITIONS OF THE ORDER AS DRAFTED

SAMPLING OF OIL & PAINT STORAGE AREAS BY ASF ARE REPORTED TO SHOW NO SIGNS OF CONT.

- USTs (ALL PRODUCT)
- 1 IN SERV (IPA)
- 3 ABAND IN PLACE
- REMAINDER REMOVED
- 1 NEW? (WILL CK ON)

1-14-93

JK

018

1 POTENTIAL RELEASE FROM  
(RELEASE) PRODUCT TANK

~

POTENTIAL TPH PLUME UNDER  
BUILDING

~

STORMWATER PERMIT APP  
SENT IN LAST YEAR, UP  
TO 7 POINT SOURCES.

-

EAF DUST 2.85 TONS/YR  
GENERATED (FULL PROD)

1-14-93

JK

019

0920 INSTRUCTION TOUR  
BEGINS

0924 PHOTO 1

LOOKING AT BAGHOUSE  
DIST. COLLECTOR ASSOC  
W/ PATTERN MAP

LOOKING SW

0928 PHOTO 2 WSW

HAS WASTE DRUM STORAGE  
AREA INDOORS OF STORAGE  
BUILDING. UNIT INDOORS  
AND OVER CONC. BLDG HAS  
SECONDARY CONT. BERM'S



1-14-93

✓

020

0930 PHOTO 3 E

PHOTO OF REMAINDER OF  
STORAGE BUILDING, PRODUCT  
STORAGE AND FLAMMABLE  
PRODUCT STORAGE AREA

- INDOORS OVER CONC W/ CONC.

- BLDG & CONC IN GOOD  
COND, HEATED

0936 PHOTO 4 E

SATELLITE ACCUM AREA W/IN  
FORKTRUCK MAINT GARAGE  
UNITS W/IN OVERPACKS ON  
CONC. FILLED w/ FUNNELS

1-14-93

JK

021

0938

PHOTO

5

E 58

PHOTO OF SOLVENT PITS

CLEANER W/IN FORETRUCK

MAINT GAR UNIT OVER

CONC

0941 ENTERED CORE ROOM

OF MAIN PLAN

0943

PHOTO

6

WNW

PHOTO

LOOKING

AT CORE

WASH MACHINE EMISSION

FILTERS.

\* MAY BE PROPRIETARY \*

1-14-93

✓

022

0954 INSPECTION CONTINUES

1021

PHOTO

7

W

PARTS WASHERS w/IN FAC  
BLDG. OVER CONC. LOCATED  
AT THE GRINDER REP &  
MAINT LOC.

1024

IDENTICAL PARTS WASHER  
LOCATED IN NORTH

TOOL ROOM. OVER CONC  
IN GOOD COND

1031

SOUTH TOOL ROOM

OF CNF DEPT.  
PARTS WASHER

1-14-73

IV

023

1035 PHOTO 8

PARTS CLEARED @ SOUTH

TOOL ROOM

1037 PHOTO 9 WSW

GENERAL REFUSE CONT.

PICKED UP BY BPT ON

DAILY BASIS. ONLY SAN

WASTES.

1038 PHOTO 10 N

BAGHOUSES FOR

BLAST OPS (R). & RAPPER

OP IN FLOBBING (R)

1-14-93

JK

024

1043

PHOTO 11 W

PHOTO LOOKING AT WIRE

FEED WELDER SHOE &  
DUST COLLECTOR. FROM IS  
USED TO STORE DUST & FINES  
FROM COLLECTOR

1046

NEW BUILDING, NEW

MACHINE AREA, ANOTHER

PARTS CLEANER (PHOTO 7)

USED FOR CUTTING HEADS

OVER CONG, INDOORS

1/4-93

JK

025

1052 PHOTO 12 SW

PAINT BOOTH FILTER WALLS

EXT SIDE. PAINTING IS

COMPLETED w/ AIR INPUT

ON NE WALL (NO PHOTO) AND

EXHAUST ON SW WALL  
(PHOTO 2)

1055 PHOTO 13 SW

OUTDIPS WORKING AT

MAIN BFF DUMPSTER USED

FOR PAINT WASTE & PALETS

1-14-93

DK

026

1056 PHOTO 14 E

BAGHOUSE DUST COLLECTION

PAGES. SET OVER GROUND SURF

ON PALLET. IMPROVED BY

DRYING TENTS

• FIREARM LOCATION OF

PAINT WASTE STORAGE

1100 B & E MAINT DEPT

PHOTO 15 SW

SA AREA IN MAINT FOR  
OILS & SOLU.

1-14-93

✓

027

1102 PHOTO 16 NE

PARTS CLEANED IN

B&E MAINT SHOP

(#30 GALS)

1104 PHOTO 17 SE

PARTS CLEANER & SOLU

DRUM - DRUM USED FOR

ISOLATED USES AT PART

LOC (#556)

-AN ADDITIONAL UNIT

IS IN BUDG #304

ALL OVER CONC IN 6000

CONO.



1-14-93

TV

028

SA = MOVED <sup>OVER</sup> INDOORS  
AND IN POLYPACKS. USED  
TO BE IN POLYPACKS OUT-  
SIDE & BEFORE ONLY  
DRUM OUTDOORS

1110 IN B&E MAINT  
LOOKING AT WW TREAT  
SYSTEM

1111 PHOTO 18 SE  
CLARIFIER UNIT AS PART  
OF UNITS. SOLIDS & LIQ  
IN UNIT. SOLIDS UP  
TO PRESS. LIQ TO PREP

1-14-93

JK

029

1113 INDOORS AT PRESS  
AREA. CONSISTS OF 2/30000  
TANKS TO PRESS

PHOTO 19 S

FILTER PRESS FOR DEWATER  
OF SLUDGE. 7 TO

PHOTO 20 SE

BUOGE HAD TANKS

@ PRESS LOC

PHOTO 21 SE

600 YD ROLLOFF OF DRIED  
SLUDGE. S

1-14-93

JK

030

LOW DISC PART TO  
SEWER PART USED AGAIN  
IN PROCESS

JK <sup>1/14</sup>

1/21 PHOTO 2/2 SE

PHOTO OFF LOW DISCHARGE

POINT IN WEIR BUDG

JK <sup>1/14</sup>

1/25 PHOTO 2/3 N

DOWN WALL AREA OF  
FILL DISPOSAL SITE

1-14-93

IX

031

1130 PHOTO

23/4 S

AT DRUM STORAGE

AREA (FORMER) FOR USED

OIL

OK 1/4

1136 PHOTO

24/5 E

EXP VIEW OF BAGOHOUSE

FOR EATE

UNIT. UNDER

BAGOHOUSE

15 30 1/4 1/4

ROLLOFF (PHOTO 2/8) SE

WHICH COULD BE PHOTO

BAR POST. ROLL OFF IS

COVERED & TAKEN DESITE

AS COND UNRECAV

1-14-93

✓

032

1139 IN POWERHOUSE

A SA & A SOLVENT

PARTS CLEANER. ALL

UNITS SIMILAR TO OTHER

UNITS @ FACILITY. LOC

INDOORS & OVER CONC.

IN GOOD COND.

STOPS

11:45 VSI ENDS AT

ASF FOUNDRY PLANT

1155 LUNCH

1-14-93

JK

033

1300 RETURN FROM LUNCH

AND DRIVE TO ASF

DISPOSAL FACILITY

1310 ARRIVE AT DISPOSAL

FACILITY AND PREP

FOR TOUR OF SITE <sup>OK</sup>

1315 PHOTO 26/7 <sup>11/14</sup> U

PILES OF RECENTLY

SEPARATED MATERIALS

1317 PHOTO 27 <sup>8:00 11/14</sup> E

VIEW OF FORMER POND #2

AT CENTER OF LANDFILL

1-14-93

IX

034

AREA, NO LONGER HOLDING  
WATER. FILLED W/ THICKETS  
2 NEG.

2/14

1320 PHOTO 28 9 S

LOOKING AT SEPARATION  
EQUIPMENT AT LANDFILL  
USED TO SORT / SEPARATE  
SOLID / LIQUID BY SIZE  
FIR FIRE IN CITY CENTER

20 2/14

1323 PHOTO 29 SE

LOOKING AT END VIEW OF  
SE LANDFILL CORNER OVER  
OLD POND 2.

1-14-93

TV

035

1329 PHOTO

3/1 W

OK 1/14

LOOKING AT GW MON  
WELLS AT DG BOUNDARY  
OF LANDFILL AREA

OK 1/14

1340 PHOTO

3/2 WAT 5

GANTRY CRANE WALL  
- OVERTOPPING CON'S SW AND  
WILL BE REMOVED IN  
FUTURE.

OK 1/14

1343 PHOTO

3/3 S 5

PHOTO OF STORM DRAIN  
USED TO CONVEY SITE  
DRAINAGE TO OFFSITE



1-14-93

JK

036

1345 CONCLUSION OF  
VSI TOUR. RETURN TO  
SITE OFFICES FOR CLOSE-  
OUT MEETING

- REQUESTING DATA TO SUPP-  
LEMENT CURRENT FILE  
MATERIALS.

- CLOSURE PLAN FOR AREA  
UNDER DAF BARRHOUSE  
TO BE SUB 1/29 TO  
MEET FED CONSENT  
ORDER REQ.

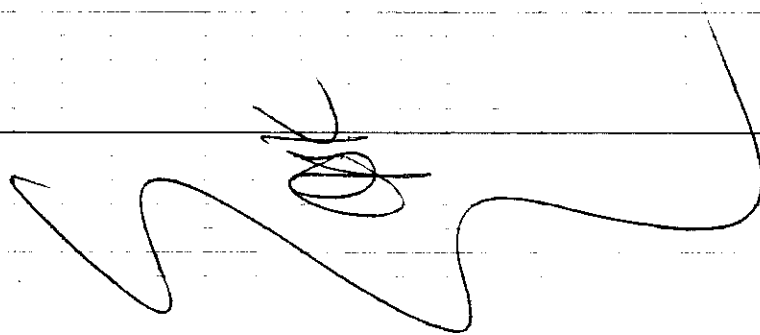
TRACY C EX 288 or 206

1-14-10

JK

037

1410 TO MEET w/ WORKS  
MANAGER

A large, stylized handwritten signature in black ink, featuring a prominent loop and a long horizontal stroke.

**ATTACHMENT C**

**CORRECTIVE ACTION STABILIZATION QUESTIONNAIRE**

## CORRECTIVE ACTION STABILIZATION QUESTIONNAIRE

Completed by:  
Date:

Jeff Surfus - A.T. Kearney, Inc.  
2/17/93

### Background Facility Information

Facility Name:  
EPA Identification No.:  
Location (City, State):  
Facility Priority Rank:

American Steel Foundries  
OH0981090418 and OH0017497587  
Alliance, Ohio

1. Is this checklist being completed for one solid waste management unit (SWMU), several SWMUs, or the entire facility?  
Explain.

Entire facility

### Status of Corrective Action Activities at the Facility

2. What is the current status of HSWA corrective action activities at the facility?

- ☐ No corrective action activities initiated  
☒ RCRA Facility Assessment (RFA) or equivalent completed  
☐ RCRA Facility Investigation (RFI) completed  
☐ Corrective Measures Study (CMS) completed  
☐ Corrective Measures Implementation (CMI) begun or completed  
☐ Interim Measures begun or completed

3. If corrective action activities have been initiated, are they being carried out under a permit or an enforcement order?

- ☐ Operating permit  
☐ Post-closure permit  
☐ Enforcement order

4. Have interim measures, if required or completed [see Question 2], been successful in preventing the further spread of contamination at the facility?

- ☐ Yes  
☐ No  
☐ Uncertain; still underway

### Facility Releases and Exposure Concerns

5. To what media have contaminant releases from the facility occurred or been suspected of occurring?

- ☒ Ground water  
☒ Surface water  
☐ Air  
☒ Soils

6. Are contaminant releases migrating off-site?

- ☐ Yes: Indicate media, concentrations, and level of certainty.
- 
- 
- 

- ☐ No  
☒ Uncertain

7a. Are humans currently being exposed to contaminants released from the facility?

- ☐ Yes  
☒ No  
☐ Uncertain

7b. Is there a potential for human exposure to the contaminants released from the facility over the next five to 10 years?

- ☐ Yes  
☐ No  
☒ Uncertain

8a. Are environmental receptors currently being exposed to contaminants released from the facility?

- ☐ Yes  
☐ No  
☒ Uncertain

8b. Is there a potential that environmental receptors could be exposed to the contaminants released from the facility over the next five to 10 years?

- ☐ Yes  
☐ No  
☒ Uncertain

#### Anticipated Final Corrective Measures

9. If already identified or planned, would final corrective measures be able to be implemented in time to adequately address any existing or short-term threat to human health and the environment?

- ☒ Yes  
☐ No  
☒ Uncertain

Additional explanatory notes:

Closure of all relevant units should address all threats.

---

---

10. Could a stabilization initiative at this facility reduce the present or near-term (e.g., less than two years) risks to human health and the environment?

- ☐ Yes  
☒ No  
☐ Uncertain

Additional explanatory notes:

---

---

---

11. If a stabilization activity were not begun, would the threat to human health and the environment significantly increase before final corrective measures could be implemented?

- ☐ Yes  
☒ No  
☐ Uncertain

Additional explanatory notes:

---

---

---

**Technical Ability to Implement Stabilization Activities**

12. In what phase does the contaminant exist under ambient site conditions?

- ☒ Solid
- ☐ Light non-aqueous phase liquids (LNAPLs)
- ☐ Dense non-aqueous phase liquids (DNAPLs)
- ☒ Dissolved in ground water or surface water
- ☐ Gaseous
- ☐ Other \_\_\_\_\_

13. Are one or more of the following major chemical groupings of concern at the facility?

- ☒ Volatile organic compounds (VOCs) and/or semi-volatiles
- ☐ Polynuclear aromatics (PAHs)
- ☐ Pesticides
- ☐ Polychlorinated biphenyls (PCBs) and/or dioxins
- ☐ Other organics
- ☒ Inorganics and metals
- ☐ Explosives
- ☐ Other \_\_\_\_\_

14. Are appropriate stabilization technologies available to prevent the further spread of contamination, based on contaminant characteristics and the facility's environmental setting? [See Attachment A for a listing of potential stabilization technologies.]

- ☐ Yes; Indicate possible course of action.

- ☒ No; Indicate why stabilization technologies are not appropriate; then go to Question 19.

Closure will address concerns

15. Has the RFI, or another environmental investigation, provided the site characterization and waste release data needed to design and implement a stabilization activity?

- ☐ Yes
- ☒ No

If No, can these data be obtained faster than the data needed to implement the final corrective measures?

- ☐ Yes
- ☒ No

**Timing and Other Procedural Issues Associated with Stabilization**

16. Can stabilization activities be implemented more quickly than the final corrective measures?

- ☐ Yes
- ☒ No
- ☐ Uncertain

Additional explanatory notes:

17. Can stabilization activities be incorporated into the final corrective measures at some point in the future?

- ☐ Yes
- ☒ No
- ☐ Uncertain

Additional explanatory notes:

## Conclusion

16. is this facility an appropriate candidate for stabilization activities?

- ☐ Yes
- ☐ No, not feasible
- ☒ No, not required

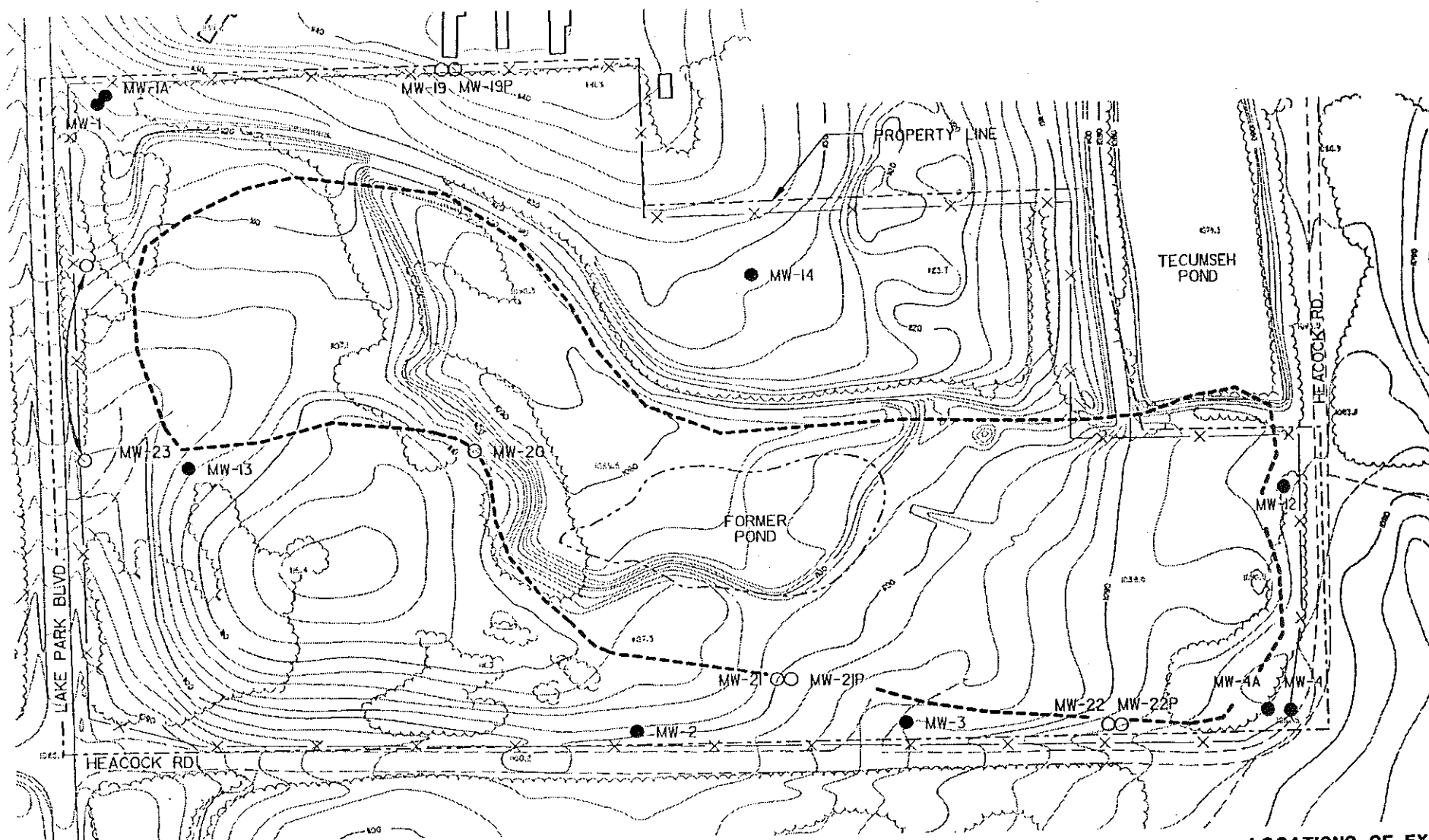
Explain final decision, using additional sheets if necessary.

Closure will address environmental  
threats.

**ATTACHMENT D**

**ASF DISPOSAL FACILITY SAMPLING RESULTS**



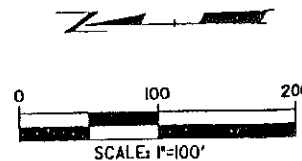


# LEGEND

- MONITORING WELL LOCATION
- PROPOSED MONITORING WELL
- - - FORMER POND BOUNDARY
- ☁ TREES, BRUSH
- X- FENCE LINE
- - - APPROXIMATE AREA OF WASTE PLACEMENT

## NOTES:

- 1) CONTOUR INTERVAL IS 2 FEET
- 2) BASEMAP BY KBM, INC., GRAND FORKS, N.D. FROM AN AERIAL SURVEY BY KUCERA INTERNATIONAL ON NOV. 17, 1991.



## LOCATIONS OF EXISTING AND PROPOSED MONITORING WELLS

SEBRING FACILITY  
AMERICAN STEEL FOUNDRIES  
ALLIANCE, OHIO

<b>RMT</b> <small>INC.</small>	Drawn By: RLB
	Approved By:
	Date: JANUARY, 1992
	Proj. No.: 249.02

TABLE 2-3

SUMMARY OF SELECT GROUND WATER QUALITY DATA  
SEBRING FACILITY  
ASF-ALLIANCE, OHIO

Well (date sampled)	pH	Conductivity (umhos/cm)	Alkalinity (mg/L)	TDS (mg/L)	Cadmium (mg/L)	Iron (mg/L)	Cr (mg/L)	Pb (mg/L)
MW-1								
7-85	5.7	872	33	741	< 0.01	16	< 0.01	0.02
8-85	5.6	800	2	730	< 0.01	43	< 0.01	0.10
9-85	6.1	1400	< 1.0	1310	< 0.01	52	< 0.01	0.03
8-86	5.6	2080	5.0	1950	< 0.01	175	< 0.01	< 0.02
9-87	3.9	1710	0	1360	0.01	178	0.02	< 0.02
MW-2								
7-85	4.9	2600	67	3240	0.02	180	0.01	0.07
8-85	4.6	2300	2	3340	0.01	260	0.05	0.13
9-85	5.1	3180	< 1.0	4010	0.01	180	< 0.01	0.07
8-86	5.2	3370	10	3990	< 0.01	245	0.02	< 0.02
9-87	4.6	3480	10	3940	0.01	273	0.02	< 0.02
MW-3								
7-85	6.3	2670	492	2730	0.01	18	0.01	0.06
8-85	6.2	2280	420	2660	0.01	16	0.04	0.06
9-85	6.9	2690	360	2260	< 0.01	11	< 0.01	0.04
8-86	7.2	2600	365	2440	< 0.01	9	0.01	< 0.02
9-87	6.3	2730	376	2200	0.01	18	0.02	< 0.02
MW-4								
7-85	6.4	1260	288	1040	< 0.01	12	< 0.01	0.03
8-85	6.4	1170	250	1120	< 0.01	16	0.06	0.06
9-85	6.9	1050	214	1240	< 0.01	14	< 0.01	0.03
8-86	7.0	2630	199	1150	< 0.01	6.5	0.02	< 0.02
9-87	6.4	1310	275	875	0.01	13	< 0.01	< 0.02

A.T. Kearney, Inc.  
222 South Riverside Plaza  
Chicago, Illinois 60606  
312 648 0111  
Facsimile 312 648 1939-2302

Management  
Consultants

RECEIVED  
OCT 1 1992  
OFFICE OF RCRA  
Waste Management Division  
U.S. DEPARTMENT OF ENVIRONMENT

ATKEARNEY

October 14, 1992

Mr. Bernie Orenstein  
Regional Project Officer  
U.S. EPA (HRM-7J)  
77 West Jackson Blvd.  
Chicago, IL 60604-3590

Reference: EPA Contract No. 68-W9-0040; Work Assignment  
No. R05-25-02; American Steel Foundry (ASF)  
Production Facility and ASF Disposal  
Facility, Alliance, Ohio; EPA I.D. Nos.  
OHD981090418 and OHD017497587, respectively;  
VSI Notification Letter Deliverable

Dear Mr. Orenstein:

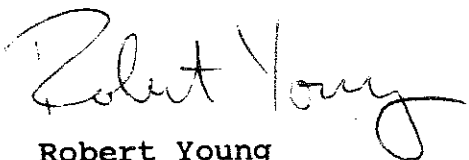
Enclosed please find a letter prepared so that it may be dated, signed and sent to American Steel Foundry (ASF) Production and ASF Disposal Facilities to notify them of the upcoming Visual Site Inspections (VSIs). This work will be performed by A.T. Kearney under the above-referenced contract. Please note that while the work assignment calls for a PA/VSI review of the ASF Disposal Facility, a PA/VSI of the American Steel Foundries Production Facility (EPA I.D. No. OHD981090418) will also be conducted. The final PA/VSI Report will include the results of both inspections. This has been requested by Steve Bouchard, the EPA Work Assignment Manager.

The VSI is presently scheduled for November 4 through November 6, 1992. The enclosed notification letter includes a tentative list of Solid Waste Management Units identified at both facilities in the PA, a VSI agenda, and a list of additional information needs which will be discussed during the VSI.

Mr. Bernie Orenstein  
October 14, 1992  
Page Two

Please call me or Mr. Jeff Surfus, the Kearney Team Work Assignment Manager, who can be reached at (313) 426-1984, if you have any questions.

Sincerely,

A handwritten signature in cursive script that reads "Robert Young". The signature is written in dark ink and is positioned above the printed name and title.

Robert Young  
Acting Technical Director

Enclosure

cc: S. Bouchard, EPA Region V  
W. Jordan  
L. Poe  
J. Surfus  
J. Koehnen  
T. Lavender-Gates



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

77 WEST JACKSON BOULEVARD

CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

HRP-8J

Mr. William Heestand  
Safety and Environmental Supervisor  
American Steel Foundries  
1001 East Broadway  
Alliance, Ohio 44601

RE: Visual Site Inspection  
American Steel Foundry  
(ASF) Production  
Facility and ASF  
Disposal Facility,  
Alliance, Ohio; EPA  
I.D. OHD981090418 and  
OHD017497587

Dear Mr. Heestand:

The United States Environmental Protection Agency (U.S. EPA) Region V has requested A.T. Kearney, Inc., U.S. EPA's RCRA Implementation Contractor, to conduct Preliminary Assessments/ Visual Site Inspections (PA/VSI) at the American Steel Foundry (ASF) Production Facility and ASF Disposal Facility, Alliance, Ohio. Under the 1984 Hazardous and Solid Waste Amendments (HSWA), PA/VSI are required of the American Steel Foundry Production and ASF Disposal Facilities. The assessment requires identification and systematic review of all solid waste streams at each of the facilities. The objectives of these assessments is to determine whether or not releases of hazardous wastes or hazardous constituents have occurred or are occurring at the sites which require further investigation. This analysis will provide information to establish priorities for subsequent remedial investigations.

An integral part of this assessment is a visual site inspection (VSI) of your facilities to verify the location of all "solid waste management units" (SWMUs) and to make a cursory determination of their condition by visual observation. The VSI supplements and updates data gathered during preliminary file reviews. During this site visit, no samples will be taken.

Attachment I is a tentative agenda and inspection plan for the VSIs. The agenda also includes a list of the potential SWMUs and AOCs identified from the file material during the preliminary review. Attachment II is a summary of information needed in order to fill in information gaps which have been identified to date.

Assistance of some of your personnel may be required in reviewing solid waste flow(s) or previous disposal practices. The purpose of this site visit is to provide a technical understanding of the present and past waste flows and handling, treatment, storage, and disposal practices. Photographs of each SWMU are to be taken to document the condition of the units at each facility and the waste management procedures used.

The VSI has been scheduled for November 4 through November 6, 1992. The A.T. Kearney inspection personnel may be accompanied by U.S. EPA Region V and Ohio EPA representatives. Your cooperation in admitting and assisting them while on site is appreciated.

In preparation for the VSIs, the inspection personnel are required to identify any potentially hazardous conditions likely to be encountered at the sites during performance of the VSIs and to prepare a safety plan that deals with the hazards, if necessary. You will be contacted by an A.T. Kearney Health and Safety Officer by telephone in the near future to obtain specific information on the level(s) of personal protection required and materials handled in each area of your facilities.

A copy of the proposed VSI Agenda (Attachment I) is enclosed. The Agenda proposes a schedule for completing VSIs at both facilities. Please review and gather the information requested in Attachment II, the information needs list, prior to the VSIs. Should you have any questions regarding this letter, please contact the EPA Work Assignment Manager, Mr. Steve Bouchard who can be reached at (312/886-7569). A copy of the PA/VSI Report, when completed, excluding Section V (Conclusions and Suggested Further Actions), may be requested by contacting Mr. Bouchard.

Sincerely,

Harriet Croke  
Chief, Ohio Permitting Section

Enclosure

cc: E. Lim, OEPA

bcc: B. Orenstein, EPA Region V  
S. Bouchard, EPA Region V  
R. Young, ATK

## ATTACHMENT I

### **PRELIMINARY ASSESSMENT/VISUAL SITE INSPECTION PROPOSED RCRA VISUAL SITE INSPECTION AGENDA**

Facility: American Steel Foundry (ASF)  
Production Facility and ASF  
Disposal Facility

EPA ID Nos.: ASF Manufacturing Facility -  
OHD981090418  
ASF Disposal Facility -  
OHD017497587

Facility Contact: Mr. William Heestand

Date of Inspection: November 4 through November 6, 1992

Inspection Team: Mr. Jeff Surfus, A.T. Kearney, Inc.  
Mr. John Koehnen, A.T. Kearney,  
Inc.  
Mr. Steve Bouchard, U.S. EPA  
Region V  
A representative of the Ohio EPA  
may be present

### OBJECTIVES OF VISUAL SITE INSPECTION

The Hazardous and Solid Waste Amendments of 1984 (HSWA) broaden the Scope of the Environmental Protection Agency's (EPA's) authority under the Resource Conservation and Recovery Act (RCRA) by requiring corrective action for releases of hazardous wastes and constituents at facilities that manage hazardous wastes. The Preliminary Assessment/Visual Site Inspection (PA/VSI) is conducted to evaluate the potential for releases to the environment and the need for corrective action.

The Preliminary Assessment/Visual Site Inspection includes a desk-top preliminary assessment (PA) of all available file information, and a visual site inspection (VSI) of the facility. Based on the review of available data for these facilities, VSIs have been determined to be necessary. The purpose of the VSIs are to:

1. Survey the site for hydrologic, geologic, and surficial features.
2. Identify solid waste management units (SWMUs) and other areas of concern, documenting and photographing all SWMUs and other areas of concern.
3. Review site information with facility representatives.



American Steel Foundry (ASF) Production Facility  
and ASF Disposal Facility  
Alliance, Ohio  
Visual Site Inspection  
November 4 - 6, 1992

ATTACHMENT I

INSPECTION PLAN AND SCHEDULE

A two-member team from our contractor will perform a three-day VSI, which will include visits to both the American Steel Foundries Production Facility and the (off-site) ASF Disposal Facility. Additional observers from the State of Ohio EPA and U.S. EPA Region V may also attend. The time-frame of the inspection tours will be dependent on the total number of SWMUs identified at the facilities, and the accessibility of those SWMUs. Contractor personnel will inspect waste generation and disposal areas such as container storage areas, surface impoundments, waste piles, former land disposal areas, and release pathways for release of wastes into the environment. An interview with the facility staff will be performed to develop a better understanding of past waste disposal practices. Pertinent geologic information consisting of well logs, USGS topographic maps, plat and zoning maps and surrounding land use patterns will be reviewed. The team will concentrate on developing a better understanding of the vertical and horizontal alignments of any surface impoundments, container storage areas, and any other waste generation, treatment, storage and disposal facilities. A review of the regional hydrogeology and site-specific data will be performed to make an assessment of depth to groundwater and its flow direction in the proximity of the Solid Waste Management Units.

The overall rationale of this inspection plan is to enable the team to trace waste streams from process through treatment and disposal. Some adjustments to the agenda will more than likely be necessary to accommodate facility staff, geographical location of units and/or operational constraints.

Preliminary information needs have been submitted as Attachment II to aid American Steel Foundry personnel in preparing for the site visit. These issues will be resolved in an introductory meeting during the VSI. A more efficient agenda may be arranged at that time to ensure that all SWMUs identified will be inspected.

American Steel Foundry (ASF) Production Facility  
and ASF Disposal Facility  
Alliance, Ohio  
Visual Site Inspection  
November 4 - 6, 1992

ATTACHMENT I

**PROPOSED VSI SCHEDULE**

November 4, 1992

TIME	ACTIVITY
8:30 - 12:00	Introductory meeting with facility representatives; discuss agenda, safety and health considerations, information needs, transportation arrangements;
12:00 - 1:00	Lunch Break
1:00 - 5:00	Detailed discussion of information needs, past and present facility operations, waste streams, and waste management practices. Identify any SWMUs and AOCs not in tentative list, resolve any other problems with SWMUs and AOCs; Begin facility tour of SWMUs and AOCs at Foundry plant;
5:00	Close of day. Discuss information needs and scheduling for tomorrows inspections.

November 5, 1992

8:30 - 12:00	Continue inspection tour of the American Steel Foundry Production Facility. The inspection tour of the production facility may conclude during this day and the inspection tour of the ASF Disposal Facility may initiate.
12:00 - 1:00	Lunch Break
1:00 - 4:00	Continue facility tour of SWMUs and AOCs at the production facility or the ASF Disposal Facility.
5:00	Close of day. Discuss information needs and scheduling for tomorrows inspections.

November 6, 1992 (if necessary)

8:30 - 12:00	Continue facility tour of SWMUs and AOCs at the production facility or the ASF Disposal Facility.
12:00	Close-out meeting.

American Steel Foundry (ASF) Production Facility  
and ASF Disposal Facility  
Alliance, Ohio  
Visual Site Inspection  
November 4 - 6, 1992

ATTACHMENT I

IDENTIFICATION OF POSSIBLE SWMUS (At Both Facilities)

<u>NO.</u>	<u>NAME</u>
1.	ASF Disposal Facility (landfill)
2.	Baghouse Collection Hopper
3.	Baghouse Dust Storage Bins (30 cu yd)
4.	Clarifier Sludge Storage Area
5.	Solvent Parts Cleaners
6.	Wastewater Treatment System
7.	Former Wastewater Treatment System(s)
8.	Wastewater Sumps
9.	Container Storage Areas:
9A.	North of Powerhouse
9B.	South of B & E Building (app 70 drums)
9C.	Drums of Paint Waste
9D.	Used Oil Storage Drums
9E.	Drums at Scrap Storage Yard

IDENTIFICATION OF POSSIBLE AOCs (At Both Facilities)

<u>NO.</u>	<u>NAME</u>
A.	Paint Disposal Area (including filters/sludges)
B.	Mill Water Line
C.	Soil Pile (N of Garage/Gas Tank removal)
D.	Pond #2 (located near ASF Disposal Fac.)
E.	Mixing Tanker Trucks

American Steel Foundry (ASF) Production Facility  
and ASF Disposal Facility  
Alliance, Ohio  
Visual Site Inspection  
November 4 - 6, 1992

ATTACHMENT II

**INFORMATION NEEDS**

1. Provide a description of waste management practices and dates implemented.
2. Provide the type and volume of waste generated at the facility.
3. Provide the most recent biennial report.
4. Provide surrounding land use information (e.g., distance to population centers).
5. For each container storage area, provide:
  - Description
  - How long was waste normally stored
  - Secondary containment
  - Type and number of containers
  - Type waste generated
  - Waste management procedures
  - Spill/release history
6. For each SWMU and AOC listed, please give:
  - Date unit began operating
  - Date operations ceased (if applicable)
  - Dimensions of unit
  - Location of unit in facility
  - Description of waste handled
  - Unit function
7. Provide a site map of suitable scale (one inch = 200 feet) to show boundaries of all contiguous property which can be used to show the locations of the SWMUs and AOCs on the property.
8. Provide sanitary, stormwater, and industrial sewer maps.
9. Provide copies of all current Federal and State permits granted.
10. Provide inspection reports for all underground storage tanks, both former and present.

American Steel Foundry (ASF) Production Facility  
and ASF Disposal Facility  
Alliance, Ohio  
Visual Site Inspection  
November 4 - 6, 1992

ATTACHMENT II

**INFORMATION NEEDS**  
(continued)

11. Provide a list of all air pollution control devices utilized at the facility and provide the most recent permit and permit applications.
12. Provide information from any soil borings performed at the facility, and any hydrogeological studies performed there.
13. Identify past or present SWMUs and AOCs which have not been identified in the VSI Agenda. Include a brief description of the wastes managed in these units, the period of operation, and a physical description. Units include, but are not limited to, the following:
  - Aboveground and underground waste storage tanks
  - Abandoned storage tanks
  - Waste storage units for solid and hazardous wastes which fall under the 90-day exemption from RCRA
  - All waste handling areas and associated activities including loading zones, transfer areas, and waste accumulation areas
  - Runoff collection sumps
14. Identify sources of drinking water in the area. Where does the facility obtain it's drinking and process water? Provide distances to closest drinking water wells (i.e. identity all wells within a five-mile radius).
15. How are domestic refuse and sanitary wastes handled at the facility?
16. Provide recent sampling results for both the American Steel Foundries facility and the ASF Disposal Facility Landfill:
  - Ground water
  - Soil
  - Wastestreams
17. Provide the start-up date of the facility and submit a history of the facility prior to the start-up date, including former owners, site uses, manufacturing processes used, waste generated, and existing buildings and/or structures.

American Steel Foundry (ASF) Production Facility  
and ASF Disposal Facility  
Alliance, Ohio  
Visual Site Inspection  
November 4 - 6, 1992

ATTACHMENT II

**INFORMATION NEEDS**  
(continued)

18. Provide the current status for the ASF Disposal Facility and the exact time frame with which waste were disposed of in this manner.
19. Provide details regarding the use of the ASF Disposal facility by anyone other than American Steel. Specifically, discuss whether this area was ever used by Nease Chemical Co. for the disposal of plant refuse (which may have contained trace amounts of chemical reactants). The disposal site was reportedly located near State Route 144, as is the ASF Disposal Facility.
20. Provide detailed documents and/or process flow diagrams for the past and present Wastewater Treatment Systems at the site. Include information on the treatment process, waste generations, and structures used, including those that may have already been removed or dismantled.

A.T. Kearney, Inc.  
222 South Riverside Plaza  
Chicago, Illinois 60606  
312 648 0111  
Facsimile 312 648 1939-2302

Management  
Consultants

D. Heller

March 27, 1989

**ATKEARNEY**

Mr. Bernie Orenstein  
Regional Project Officer  
U.S. Environmental Protection Agency  
Region V  
230 South Dearborn Street  
Chicago, Illinois 60604

Reference: EPA Contract No. 68-01-7374; Work Assignment  
No. R25-01-29; American Steel Foundries and  
ASF Disposal Facility, Alliance Ohio; EPA I.D.  
Nos. OHD981090418 and OHD017497587,  
Respectively

Dear Mr. Orenstein:

Enclosed please find the Preliminary Review (PR) for the above-referenced facilities. The American Steel Foundry (ASF) production facility and the ASF Disposal Facility are located on two distinct land properties under separate EPA I.D. numbers. The VSI could not be scheduled due to the status of current litigation between American Steel Foundry and EPA. To facilitate the completion of VSI/RFA process in the future, Don Heller, the Technical Monitor has requested that a PR Report be prepared based on file materials. Mr. Heller also requested that the PR be conducted for both the foundry and the disposal facility due to the close relationship between the facilities and the fact that the waste generated at the foundry was disposed directly to the disposal facility.

American Steel Foundry is a major producer of steel castings for the railroad industry. The main production facility is located on the east side of the city of Alliance in northeastern Ohio. Prior to May, 1987, a mixture of electric arc furnace baghouse dust and wastewater treatment clarifier sludge was generated at the approximately two miles east of the ASF production facility. According to EPA tests, arc furnace dust has tested EP toxic for lead and cadmium prior to mixing with the sludge. Although components of the waste stream have tested EP toxic, ASF has contended that the disposed material is a non-hazardous exempt waste.

Mr. Bernie Orenstein  
March 27, 1989  
Page 2

Operations at the Disposal Facility have included disposing of the waste in an on-site pond. The facility is surrounded by several other ponds. These ponds are believed to be hydraulically interconnected through the groundwater system. Because of the vulnerable ground water situation, the EPA and OEPA are concerned about this site and have entered litigation with ASF over the hazardous nature of the waste material and the applicability of RCRA to the facility.

As a result of the Preliminary Review a total of ten SWMUs were identified at the two facilities. Further information needs are provided with the PR Report.

If you have any questions or concerns, please feel free to contact me at (312) 648-0111.

Sincerely,



Ann L. Anderson  
Technical Director

Enclosure

cc: ✓ D. Heller, EPA Region V  
J. Levin  
D. Bean  
A. Williams  
D. LaRusso  
W. Rohrer, DPRA

2734E



PRELIMINARY REVIEW

AMERICAN STEEL FOUNDRY AND ASF DISPOSAL FACILITY  
ALLIANCE, OHIO

EPA I.D. NOS. OHD981090418 AND OHD017497587

PREPARED FOR

U.S. ENVIRONMENTAL PROTECTION AGENCY  
REGION V  
230 SOUTH DEARBORN STREET  
CHICAGO, ILLINOIS 60604

PREPARED BY

A. T. KEARNEY, INC.  
222 SOUTH RIVERSIDE PLAZA  
CHICAGO, ILLINOIS 60606

AND

DPRA INCORPORATED  
245 EAST SIXTH STREET, SUITE 813  
ST. PAUL, MINNESOTA 55101

EPA CONTRACT NO. 68-01-7374  
WORK ASSIGNMENT NO. R25-01-29

MARCH 1989

## PRELIMINARY REVIEW REPORT (PR)

### RCRA FACILITY ASSESSMENT (RFA)

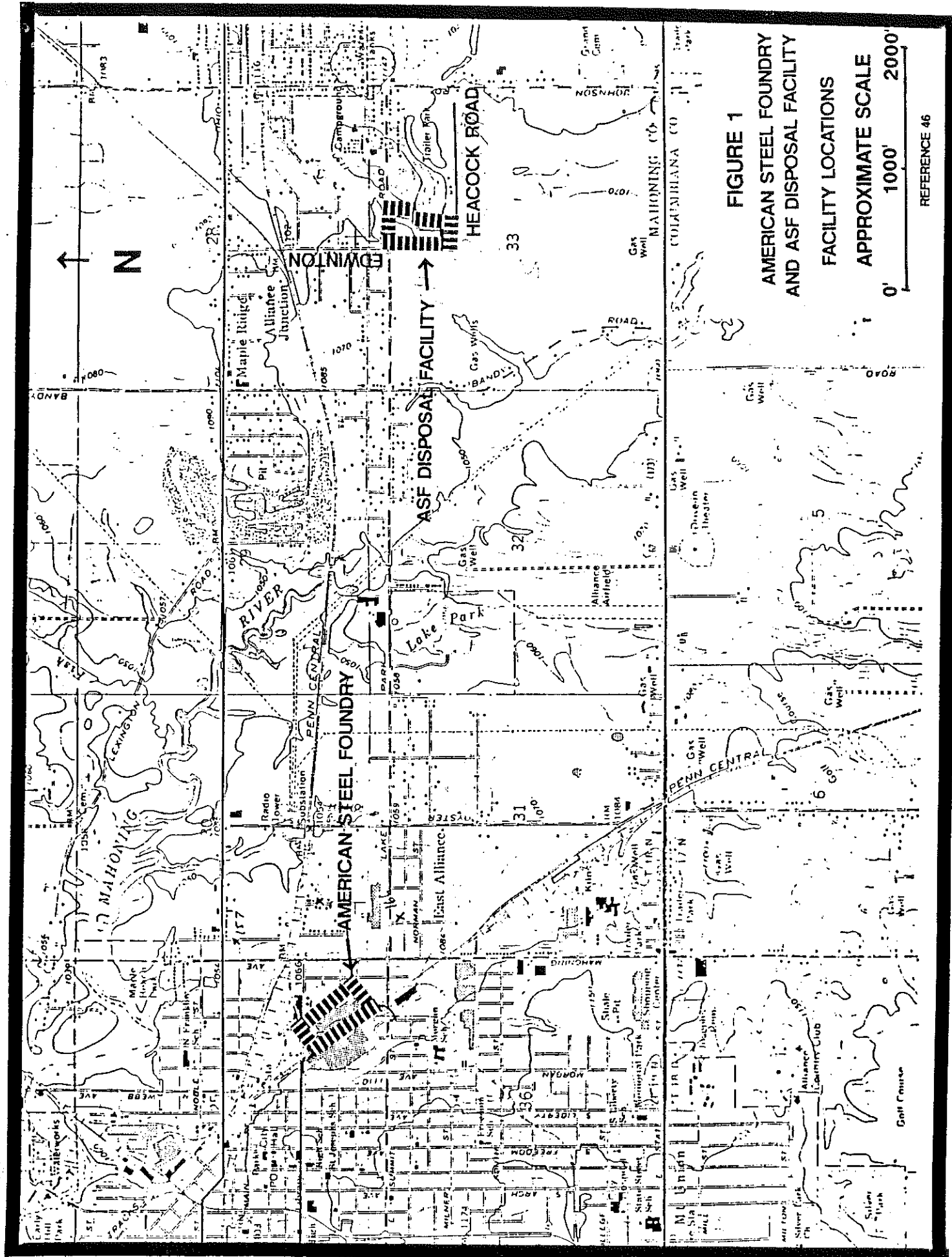
1. Facility Name: American Steel Foundries and ASF Disposal Facility  
EPA I.D. Nos.: OHD981090418 (American Steel Foundry)  
OHD017497587 (ASF Disposal Facility or Sebring Township Facilities)  
Preparers: Greg Kvaal, DPRA Incorporated  
Steven Heikkila, DPRA Incorporated  
Date: March, 1989

2. General Description of Facility and Processes:

- A. Description

American Steel Foundry (ASF) is a major producer of steel castings for the railroad industry (Ref. 47). The plant is located on the east side of the City of Alliance in the northeastern part of Ohio (Figure 1). The manufacturing operations include casting, core sand washing, wet scrubbing for dust collection, and quenching (Ref. 3). Wastewaters generated from these processes are treated on site for solids removal and pumped to the City of Alliance's Wastewater Treatment Plant.

The foundry currently generates only one hazardous waste on a regular basis, arc furnace dust from its steel melting operation. The waste is generated during a steel scrap melting process in the production of steel castings and is collected in a baghouse dust collector. The material is collected in an internal dust hopper and is periodically discharged by screw conveyor into a closed semi-trailer for transport to a recycler that reclaims basic materials. Although the dust is not a "K" listed waste, it is a characteristic waste by virtue of its levels of lead and cadmium obtained from the EP toxicity test.



The material is non-flammable, has a pH of approximately 10, and is non-corrosive and non-reactive (Ref. 47).

Prior to May, 1987, American Steel disposed of a mixture of its electric arc furnace baghouse dust and clarifier sludge in the ASF Disposal Facility (Ref. 53).

The American Steel Foundries (ASF) Disposal Facility is located two miles east of the ASF production facility at Lake Park Boulevard and Heacock Road in Smith Township Mahoning County, Ohio near the City of Sebring (Figure 1). Formerly a coal strip mine, this property was purchased in 1966 by American Steel Foundries and in 1967, was approved by the Board of Health of the Mahoning County General Health District for the operation of an industrial waste disposal site (Ref. 53).

Since the late 1970s, U.S. Environmental Protection Agency (U.S. EPA) and Ohio Environmental Protection Agency (OEPA) have been in disagreement with ASF over the hazardous or non-hazardous nature of the waste and the regulatory status of the disposal facility. Currently ASF claims to have ceased disposal of arc furnace dust at the facility, but OEPA believes the facility continues to be in violation of treatment, storage, and disposal regulations at the disposal facility. Also, ASF is currently in litigation with U.S. EPA regarding the applicability of RCRA to the foundry and disposal facilities.

#### **B. Identification of Potential Solid Waste Management Units**

Ten potential Solid Waste Management Units (SWMUs) were identified during this Preliminary Review. The ten potential SWMUs and status of release for each are listed below.

<u>Potential SWMU</u>	<u>Releases (yes/no/unknown/suspected)</u>
i. ASF Disposal Facility	Yes
ii. Baghouse Dust Storage Bins	Unknown
iii. Mill Water Line	Unknown
iv. Clarifier Sludge Storage	Unknown
v. Wastewater Treatment Units	Unknown
vi. Past Wastewater Treatment Units	Unknown
vii. Used Oil Storage	Unknown
viii. Scrap Storage Area	Unknown
ix. Wastewater Sumps	Unknown
x. Mixing Tanker Truck	Unknown

i. Specific Unit Information: ASF Disposal Facility

A. Unit Type: Waste Disposal

Age: 22 years

Capacity: Unknown

Period of Operation: 1967 to present

Waste Type: Open hearth slag, sand, clarifier sludge, arc furnace dust (D006) EP Toxic for cadmium and (D008) EP Toxic for lead, and unapproved materials.

<u>Volume:</u>	<u>Estimated Quantity 1986 (Ref. 44)</u>
<u>Waste Type</u>	
Foundry Pit Slag	73 yd <sup>3</sup> /month
Furnace Pit Slag	83 yd <sup>3</sup> /month
Core Sand and Miscellaneous Scrap	148 yd <sup>3</sup> /month
Sludge and Electric Arc Furnace Dust	1,735 yd <sup>3</sup> /month
<u>Other sweepings</u>	<u>561 yd<sup>3</sup>/month</u>
Total	2,600 yd <sup>3</sup> /month

Hazardous Constituents: EP toxic D006 (cadmium) and D008 (lead) wastes

Regulatory Status: ASF is an interim status RCRA facility. ASF filed for a Part A application for landfill disposal of D006

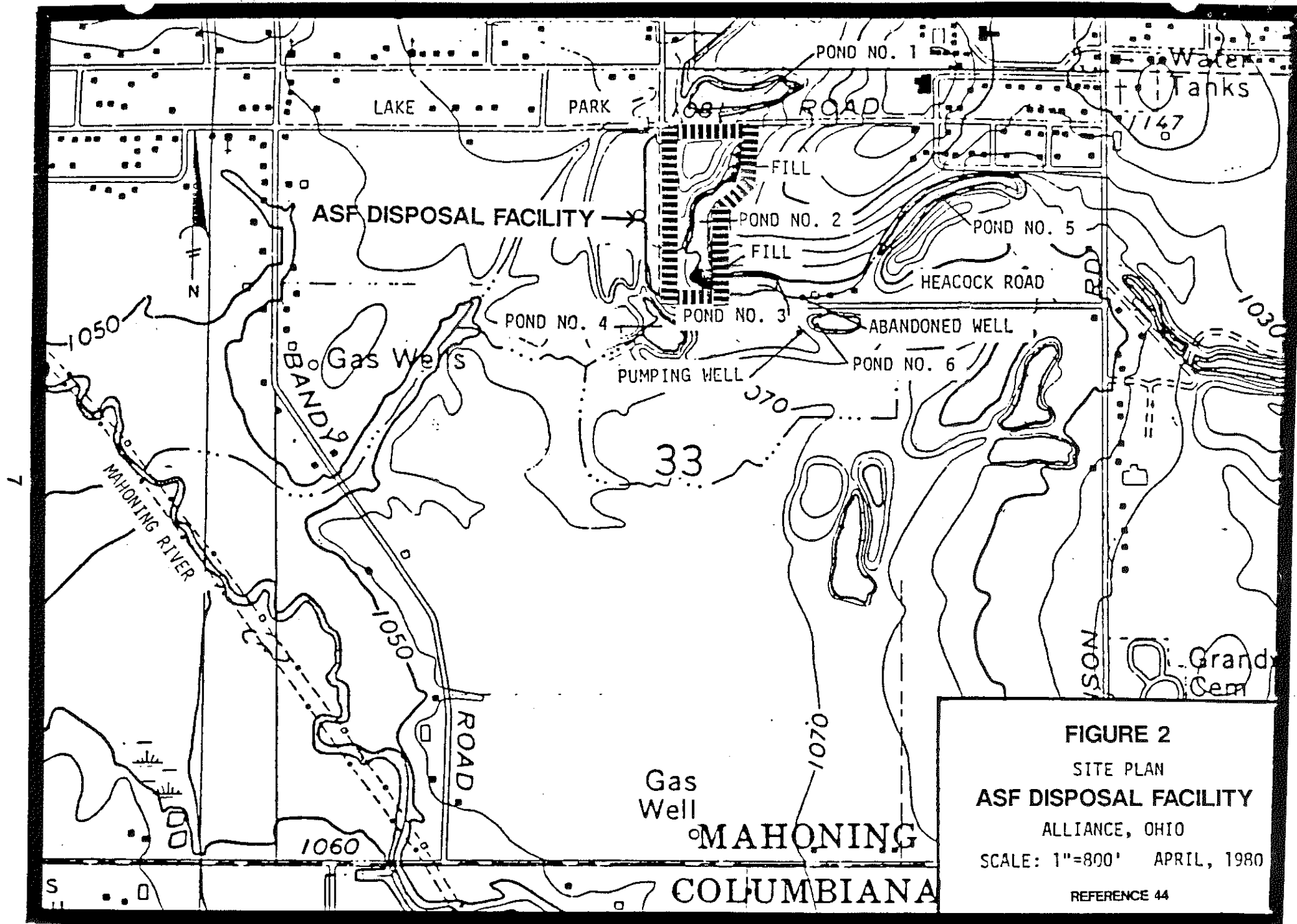
waste in November, 1980 (Ref. 53). In June, 1982, ASF requested withdrawal of the Part A based on testing of the waste. The U.S. EPA acknowledged this request in April, 1983 based on testing data submitted by ASF (Ref. 53). U.S. EPA did not grant this request based on OEPA (1984) and U.S. EPA (1986) sampling of waste streams at ASF (Ref. 53). In September, 1988, ASF applied for protective filing of a solid waste license application with the Mahoning County Board of Health, though they felt the disposed materials were exempt (Ref. 60). In November, 1988, OEPA prohibited the Mahoning County Board of Health from issuing a solid waste disposal license as ASF had not obtained a Permit to Install from OEPA (Ref. 62). It was also noted in Reference 62 that in November, 1988, OEPA was involved with an enforcement action against ASF for open dumping of RCRA regulated wastes. ASF is currently in litigation with U.S. EPA regarding the applicability of RCRA to the foundry and the disposal facility (Ref. 63).

- B. Unit Description: The ASF Disposal Facility is located southeast of the intersection of Lake Park Boulevard and Edwington Avenue in Alliance, Ohio. The facility is located in an old strip-mining pit which also included deep mine shafts. The area is approximately 1000 feet long by 600 feet wide on the north side and 300 feet wide on the south end (Figure 2). The property was purchased by ASF in 1966 and was approved for operation as an industrial waste disposal site in 1967. Waste streams

originally approved for disposal at this facility by the Mahoning County General Health District included open hearth slag, sand, dirt, silica sand, and various types of brick and sand washer sludge. Throughout the 1970s, inspections conducted at the facility by the local health department and the Office of Land Pollution Control noted frequent occurrences of open dumping and disposal of unapproved material (Ref. 53). Ohio EPA inspections have noted the presence of deep mines exposed along the highwall of the pit. Prior to 1987, the facility was used for disposal of a mixture of electric arc furnace dust and wastewater treatment clarifier sludge. Although components of the disposed waste stream have tested EP toxic, ASF has contended that the disposed material is a non-hazardous exempt waste.

The area immediately west and south of the site is the location of an abandoned municipal landfill for the City of Sebring. The municipal landfill and previous coal mining activities are believed to have affected local groundwater quality in the area.

Surface drainage from the site flows to the southwest across the old municipal landfill and into a tributary of the Mahoning River. Six ponds are located near the ASF disposal site (Figure 2). These ponds were created by the strip mining activities. Pond No. 1 was formed in an old strip mine pit. It is located immediately north of the ASF Disposal Facility. Pond No. 2 is a water filled strip-pit which has been partially filled in with foundry slag, sand, sludge, and furnace dust. Pond No. 2 is the only pond on ASF property. Pond No. 3 is immediately east of the ASF facility.



**FIGURE 2**  
SITE PLAN  
**ASF DISPOSAL FACILITY**  
ALLIANCE, OHIO  
SCALE: 1"=800' APRIL, 1980  
REFERENCE 44



Pond No. 4 is located immediately south of Pond No. 2 on the site of the old City of Sebring municipal landfill. In April, 1988, an inspector noted a bright reddish-orange color in the water in Pond No. 4. Pond No. 5 is located east of the ASF facility and Pond No. 6 is southeast of Pond No. 2 (Ref. 53).

A Comprehensive Monitoring Evaluation of this site conducted in June, 1988 by OEPA noted that springs and seeps within the pit area indicate that the ponds appear to be hydraulically interconnected to each other and to the groundwater system (Ref. 53).

The strip-mining pit comprising the ASF Disposal Facility was excavated into bedrock. A highwall exists at the site that at one time measured 50 to 60 feet in height. Soil borings adjacent to the ASF facility, conducted for Tecumseh Village in 1973, showed the rock strata to be comprised primarily of alternating thick and thin layers of sandstone and shale with varying thicknesses of coal and underclay (Ref. 53).

Springs have been noted by OEPA inspectors within the pit area. Also, static water levels in soil boring (conducted by Bowser Morner) in the pit all lie at the same approximate elevation as the surface of the ponds. These findings indicate an interconnection between the ponds and the local groundwater.

Additional  
Information  
Needed

1. Provide information on any remedial work conducted at the ASF Disposal Facility.
2. Provide latest groundwater sampling results, locations and screen depths, and a potentiometric map from monitoring wells at the ASF Disposal Facility.
3. Provide clarification of the regulatory status of the ASF Disposal Facility.
4. Estimate of the type, amount, and location of waste types disposed at the ASF Disposal Facility.
5. Indicate the location of areas where open dumping or disposal of unapproved materials allegedly occurred in the past. What were these materials and their approximate volume?
6. Provide plan view showing surface water drainage from the site and any analysis of the run-off.

ii-x. Specific Unit Information: Remaining Units

- A. Unit Types: Baghouse Dust Storage Bins, Mill Water Line, Clarifier Sludge Storage, Wastewater Treatment Units, Past Wastewater Treatment Units, Used Oil Storage, Scrap Storage Area, Wastewater Sumps, and Mixing Tanker Trucks

Age: Unknown

Capacity: Unknown

Period of Operation: Unknown

Waste Type: Arc furnace baghouse dust, wastewater, wastewater sludge, used oil, scrap

Volume: Unknown

Hazardous Constituents: EP Toxicity D006 (cadmium) and D008 (lead) wastes

Regulatory Status: In December, 1976, effluent from the ASF facility was diverted from the Mahoning River (Outfall 001), to the City of Alliance sewer system (Ref. 34). In February, 1979, ASF withdrew its request for an NPDES permit as all discharges to the Mahoning River had ceased (Ref. 36). In June, 1980, the proposed NPDES permit was withdrawn by OEPA (Ref. 37). ASF is currently in litigation with U.S. EPA regarding the applicability of RCRA to the foundry and the disposal facility (Ref. 63).

- B. Unit Description: There is no information specific to any of these remaining units in the file materials received from OEPA. All were identified through references relating to the ASF Disposal Facility or located on a facility drawing dating from 1963 (Ref. 64). The

following is a list of information that should be collected during a visual site inspection for inclusion in the final RFA.

Additional  
Information  
Needed

1. Provide a plan view of the foundry showing the location and approximate dimensions of the preliminary SWMUs.
2. Provide the current composition and disposition of wastewater sludges and electric arc furnace dust generated at the facility.
3. Provide information on current wastewater treatment systems including construction details, capacity, age, flow diagrams, etc.
4. Provide drawings showing the location of process sewer and storm sewer lines.
5. Provide drawing showing surface water drainage system and ultimate disposition of stormwater.
6. Submit information relative to the history of the facility including date of organization and past land uses.
7. Provide a history of leaks, spills, or other uncontrolled releases at the facility and describe corrective action taken.

8. Dates of operation, construction information, release history, and release controls and all identified SWMUs.
9. Provide the location of any waste accumulations, treatment, or disposal units (historic or current) not identified in this document. Include dimensions, capacity, dates of operation, materials of construction, release controls, and history of releases.

C. Monitoring Description (groundwater, surface water, etc):

Originally, groundwater monitoring at the ASF Disposal Facility began in 1985 to provide documentation for a Permit to Install application to OEPA (Ref. 44). Surface water sampling and soil borings were conducted in 1985, and monitoring wells were installed in late 1985 in borings 1 to 4. Soil boring 1 was placed in the northeast corner of the site and borings 2, 3, and 4 were placed along the extreme western boundary of the site (Ref. 44). Soil boring 5 was taken in the center of the center of the dry ash and foundry sand disposal area at the south end of the site (Ref. 44).

The reasoning behind the location and screening intervals of the monitoring wells was not clearly stated in the Environmental Assessment Report (Refs. 44, 53). The aquifer system at the facility has not been clearly defined and the rationale for location of screening intervals does not appear to be an appropriate method to define and monitor the uppermost aquifer system at the facility (Ref. 53).

As of June, 1988, the facility did not have a formal sampling and analysis plan in place. Groundwater sampling in 1985 found levels of chromium,

cadmium, and lead to exceed the U.S. EPA maximum contaminant levels in several samples collected from four monitoring wells (Ref. 53).

Sampling of surface waters and test wells in 1985 by an ASF contractor found that chromium and cadmium levels were not elevated significantly in surface water or groundwaters, and suggested that lead detected at the site was coming from the old City of Sebring Municipal Landfill.

Groundwater samples taken in 1987 showed cadmium levels exceeding the U.S. EPA maximum contaminant levels in all four monitoring wells (Ref. 53).

#### D. Environmental Setting:

The American Steel Foundry (ASF) facility is located in Mahoning County within the Allegheny Plateau physiographic province of northeastern Ohio (Ref. 53). The soils and the bedrock surface in this area exhibit the effect of several periods of glaciation which occurred during the Pleistocene Epoch (Ref. 44).

The surficial glacial deposits have been investigated in an area southwest of the City of Sebring, located approximately three miles east of the ASF facility. Ground moraine deposits exist in this area with a large end moraine consisting of Lavery tills located approximately two miles to the southwest. The glacial drift deposits average less than 25 feet in thickness in the vicinity of Sebring (Ref. 53). These deposits are considerably thicker near the City of Alliance along the Mahoning River where there is evidence of an old valley floor at the 200 foot depth (Ref. 44).

The sedimentary bedrock in this area underlies the glacial deposits and consists of alternating layers of sandstone and shale with thin lenses of limestone and coal. The bedrock is part of the Allegheny and Pottsville

Groups which are of Pennsylvanian Age. The bedrock dips to the southwest of an approximate grade of 1 percent in the vicinity of the ASF facility (Ref. 53). Near the City of Alliance, the bedrock surface has been eroded by glacial meltwater to a depth of approximately 200 feet.

The major aquifers in Mahoning County occur within the bedrock sandstone formations and yield adequate volumes of water sufficient for farm and suburban home use. The unconsolidated glacial clays overlying the bedrock yield little or no water; however, some well-sorted gravel near surface streams may yield more than 500 gallons per minute. Terrace gravels are known to yield over 1000 gallons per minute near the Mahoning River, although these deposits are not horizontally extensive (Ref. 53). Major bedrock aquifers in Mahoning County include the Clarion Shale Member of the Allegheny Group and the Homewood, Connoquenessing, and Sharon Members of the Pennsylvanian Pottsville Group.

The ASF Disposal Facility is located within a strip-mine pit adjacent to a valley fill deposit along the Mahoning River. Here, the deposits consist of isolated sand and gravel lenses in thick glacial outwork deposits which may reach a thickness of 100 feet. Approximately one-half mile west of the disposal facility, these deposits range up to 200 feet in thickness above the old valley floor (Ref. 53).

The strip-mine pit, which is the site of the ASF Disposal Facility, was mined for the clay (known as the Lower Kittanning Clay) beneath a small coal seam. Borings drilled through the glacial deposits in the mined out pit area encountered shale bedrock at a depth of approximately 80 feet below the ground surface. The overlying coal bed was approximately one foot thick and was underlain by at least ten feet of clay shale. Beneath the clay was 17 feet of shale to the bottom of the borings. This formation may

represent the Clarion Shale which has been identified as a major aquifer in the area (Ref. 53).

Very little hydrogeologic data are available for the site and the aquifer system beneath the disposal facility has not been defined. Water table and surface maps are also not available. Potential aquifers include the alternating sandstone, shale, and coal strata which are exposed along the strip pit walls. Springs have been observed within the pit which indicate the pit/fill area is actually located within a shallow aquifer. Static water levels in soil borings are similar to the elevation of water in local clay pits which suggests extensive lateral groundwater interconnections (Ref. 53).

Water wells drilled in the vicinity of the ASF Disposal Facility draw water from the alternating sandstone, shale, limestone, and coal strata present in the bedrock. Depths of the wells range from 161 to 398 feet and yield from two to 16 gallons per minute. Static water levels in these wells range from depths of 22 to 70 feet below the ground surface (Ref. 53).

E. Evidence of Suspected Past or Current Releases:

It has been documented that D006 and D008 wastes have been disposed in the ASF Disposal Facility along with unknown "unapproved" materials. Runoff from the site enters a tributary to the Mahoning River, and the six ponds at or near the site are believed to be hydraulically connected to each other and to the local groundwater system.

At the foundry itself, only a small release to the soil of baghouse dust from the collection hopper was reported on August 27, 1987 in the file information. This spill was reportedly cleaned up immediately.



3. Visual Site Inspection (VSI)

A. Specific Objectives:

1. Conduct a Visual Site Inspection (VSI) of each Solid Waste Management Unit for evidence of current and previous leaks, spills, or releases.
2. Determine the regulatory status of the ASF facilities and obtain a copy of the Part A application.
3. Photograph all SWMUs.
4. Obtain information needs listed for SWMUs listed in the Specific Unit Information section.

## REFERENCES

1. Carson, Van, Squire, Sanders & Dempsey, Letter to Ira Whitman, OEPA, Re: Request for Adjudication NPDES Permit Hearing, July 12, 1974.
2. Rosenzweig, H., Ohio Attorney Generals Office, Letter to Van Carson, Squire, Sanders & Dempsey, Re: Receipt of Request for Hearing, August 7, 1974.
3. OEPA Proposed NPDES Permit to Discharge, American Steel Foundries, September 23, 1974.
4. Knick, Robert, NEDO, Memorandum to Jack Lilley, NEDO, Re: NPDES Permit hearing, November 26, 1974.
5. Myers, Gary R., Memorandum to Sam Bleicher, Re: American Steel NPDES Permit, December 4, 1974.
6. Emick Robert, NEDO, Memorandum to Jim Shey, Re: NPDES Permit, December 12, 1974.
7. Traina, V. P., R. E. Warner and Associates, Letter to J. Difloure, American Steel Foundries, Re: Wastewater Discharge Characteristics from Outfall 001, December 30, 1974.
8. Carson, Van, Squires, Sanders & Dempsey, Letter to Richard P. Fahey, Assistant Attorney General, Re: American Steel Case No. 74-WD-417, January 9, 1975.
9. Meyers, Gary R., Assistant Attorney General, Letter to Robert Emick, NEDO, Re: American Steel Case No. 74-WD-417, January 13, 1975.
10. Emick, Robert, NEDO, Memorandum to Gary Meyers, Assistant Attorney General, Re: American Steel NPDES Case No. 74-WD-417, January 20, 1975.
11. Emick, Robert, NEDO, Letter to John Kelly, U.S. EPA Region V, Re: Modification of NPDES Permit, January 21, 1975.
12. Dunsel, Steven J., NEDO, Memorandum to Gary Myers, Assistant Attorney General, Re: American Steel Wastewater, February 28, 1975.
13. Carson, Van, Squires, Sanders & Dempsey, Letter to Gary Meyers, Assistant Attorney General, Re: American Steel Case No. 74-WD-417, August 1, 1975.
14. Fahey, Richard P., Assistant Attorney General, Letter to Van Carson, Squires, Sanders & Dempsey, Re: American Steel Case No. 74-WD-417, September 12, 1975.
15. OEPA Non-Major Industrial Wastewater Inspection Report, September 24, 1975.

16. Fahey, Richard P., Assistant Attorney General, Letter to William Skowroski, OEPA, Re: American Steel Case No. 74-WD-417, September 24, 1975.
17. Traina, V. P., R. E. Warner and Associates, Letter to John Difloure, American Steel, Re: Proposed Treatment System, November 4, 1975.
18. Carson, Van, Squire, Sanders & Dempsey, Letter to Richard P. Fahey, Assistant Attorney General, Re: American Steel Case No. 74-WD-417, December 9, 1975.
19. Larry Valentine Notes on Alliance Water Supply, December 19, 1975.
20. Fahey, Richard P., Assistant Attorney General, Letter to William Skowroski, OEPA, Re: Response to Facility Letter, December 29, 1975.
21. Carson, Van, Squire, Sanders & Dempsey, Letter to William Skowronski, OEPA, Re: Proposed Tie-in to City of Alliance Sewer System, March 15, 1976.
22. Skowronski, William, OEPA, Letter to Carl Seifried, City of Alliance, Re: Proposed Tie-in to City of Alliance Sewer, March 10, 1976.
23. Skowronski, William, NEDO, Letter to Van, Carson, Squire, Sanders & Dempsey, Re: Proposed meeting, March 10, 1976.
24. Skowronski, William, NEDO, Memorandum to Dennis Munchnicki, OEPA, Re: Cover letter for Draft NPDES Permit, March 22, 1976.
25. Munchnicki, Dennis, OEPA, Memorandum to Bill Skowronski, NEDO, Re: American Steel NPDES Case No. 74-WD-417, April 6, 1976.
26. Telephone memorandum from William Skowronski, NEDO, to Van, Carson, Squire, Sanders, & Dempsey, Re: Draft Permit Response, May 6, 1976.
27. Telephone memorandum from William Skowronski, NEDO, to Van, Carson, Squire, Sanders & Dempsey, Re: Draft Permit Response, May 8, 1976.
28. Carson, Van, Squire, Sanders & Dempsey, Letter to William Skowronski, NEDO, Re: American Steel Water Quality Matters, June 15, 1976.
29. Munchnicki, Dennis, Assistant Attorney General, Letter to Van, Carson, Squire & Dempsey, Re: Modifications to NPDES Permit, June 17, 1976.
30. Skowronski, William, NEDO, Memorandum to Dennis Munshnicki, Assistant Attorney General, Re: Acceptance of NPDES Permit, June 25, 1976.
31. Skowronski, William, NEDO, Memorandum to Dennis Munchnicki, Assistant Attorney General, Re: Adjudication Hearing, September 9, 1975.
32. Telephone Memorandum from Russ Hart, OEPA, to W. Barton, American Steel, October 8, 1976.

33. Munchnicki, Dennis, Assistant Attorney General, Letter to Bill Miller, Re: Cover Letter for Final NPDES Permit, November 5, 1976.
34. Bell, B. F. E., American Steel, Letter to Russell D. Hart, NEDO, Re: Connection to City of Alliance Sewer, December 7, 1976.
35. Hart, Russell, NEDO, Memorandum to Richard Whitt, OEPA, Re: Change in Monitoring Procedure, December 20, 1976.
36. Haymen, Edward, Squire, Sanders & Dempsey, Letter to Ralph W. Everett, OEPA, Re: Withdrawal of Request for NPDES Permit, February 7, 1979.
37. Everett, Ralph, OEPA, Letter to American Steel, Re: Withdrawal of NPDES Permit, June 3, 1980.
38. OEPA Inspection Memorandum for American Steel, September 23, 1980.
39. OEPA No NPDES Permit Required Worksheet, September 29, 1980.
40. McAvoy, James F., OEPA, Letter to American Steel, Re: NPDES Permit Withdrawal, November 24, 1980.
41. Barnes, Geoffery, K., Squire, Sanders & Dempsey, Letter to Catherine McCard, NEDO, Re: American Steel Foundries, June 7, 1985.
42. Alliance Works Electric Arc Furnace Dust/Sludge Test Results, C. A. Ruud, July 26, 1985.
43. Barnes, Geoffery K., Squire, Sanders & Dempsey, Letter to Catherine A. McCard, NEDO, Re: Disagreements with NEDO, August 8, 1985.
44. Environmental Assessment of the American Steel Foundries Lake Park Drive Disposal Site for American Steel, Bowser Morner, February 14, 1986.
45. Barnes, Geoffery K., Squire, Sanders & Dempsey, Letter to Kevin Bonzo, OEPA, Re: American Steel, November 11, 1987.
46. OEPA Potential Hazardous Waste Site Preliminary Assessment, American Steel, November 24, 1985.
47. Dixon, C. R., American Steel, Letter to Deborah G. Cope, Horsehead Resource Development Co., Re: Change in Manifest Numbers, March 21, 1988.
48. RCRA Inspection Schedule Notes, May 12, 1988.
49. RCRA Inspection Schedule Notes, May 17, 1988.
50. Bonzo, Kevin, OEPA, Letter to Paul Limbach, American Steel, Re: RCRA Inspection Request, May 3, 1988.

51. Ruud, Charles, American Steel, Letter to Kevin Bonzo, OEPA, Re: Confirmation of RCRA Inspection, May 18, 1988.
52. Bonzo, Kevin, OEPA, Letter and Attachment to Paul Limbach, American Steel, Re: RCRA Interim Status Inspection Report, June 14, 1988.
53. Comprehensive Monitoring Evaluation of American Steel Disposal Facility, June 21, 1988.
54. Krichbaum, Timothy, OEPA, Letter to Jim Brossman, U.S. EPA Region V, Re: Cover Letter for CME Report, June 21, 1988.
55. Dimoff, Keith, DSHWM, Memorandum to Kevin Bonzo, OEPA, Re: EPA I.D. Number Correction, June 23, 1988.
56. Limbach, P. A., American Steel, Letter to Keith Demoff, OEPA, Re: Hazardous Waste Report, July 14, 1988.
57. Schillowski, Phillip, Squire, Sanders & Dempsey, Letter to Kevin Bonzo, OEPA, Re: Response to June 14, 1988 letter, July 12, 1988.
58. Bonzo, Kevin, OEPA, Letter to Paul Limbach, American Steel, Re: Hazardous Waste Concerns, September 12, 1988.
59. Schillowski, Phillip, Squire, Sanders & Dempsey, Letter to Kevin Bonzo, OEPA, Re: Response to Violations, September 26, 1988.
60. Uecke, Stephen, Mahoning County General Health District, Letter to David Budd, OEPA, Re: Application for Solid Waste License, September 30, 1988.
61. Savage, Michael, DSHWM, Letter to David Statler, American Steel, Re: Final CME Report, October 3, 1988.
62. Budd, David, OEPA, Letter to Stephen Uecke, Mahoning County General Health District, Re: Solid Waste Disposal License, November 22, 1988.
63. Schillowski, Philip C., Squire, Sanders & Dempsey, Letter to Greg Kvaal, DPRA Incorporated, Re: The Proposed Visual Site Inspection of ASF Facilities, February 15, 1989.
64. American Steel foundry Drawing No. A3-5159 December 11, 1963, Revised January 7, 1985

*Squire, Sanders & Dempsey*

*Counsellors at Law  
BancOhio National Plaza  
155 East Broad Street  
and  
250 East Broad Street  
Columbus, Ohio 43215  
Murphey, Young & Smith*

*Additional Offices:*

*Brussels, Belgium  
Cleveland, Ohio  
Miami, Florida  
New York, New York  
Phoenix, Arizona  
Washington, D.C.*

*Telephone: (614) 365-2700  
Telecopier: (614) 224-0332*

*Telephone: (614) 365-2800  
Telecopier: (614) 228-0955*

*Direct Dial Number*

*(614) 365-2736*

February 15, 1989

BY TELECOPY

Greg Kvaal, Project Environmental  
Engineer  
DPRA  
245 East Sixth Street  
Suite 813  
St. Paul, Minnesota 55101

RECEIVED

FEB 17 1989

OFFICE OF RCRA  
Waste Management Division  
U.S. EPA, REGION V

Re: The Proposed Corrective Action Visual  
Site Inspection of the American Steel  
Foundries Facility in Mahoning County, Ohio

Dear Mr. Kvaal:

Ed Brosius has passed on to us your letter and the attached agenda for the corrective action inspection you wish to perform at American Steel Foundries ("ASF") on February 16, 1989. On behalf of ASF, we are declining your request to inspect the facilities for the reasons noted below.

Your letter states that you plan to perform a site inspection at the American Steel Foundry Alliance plant and the Company's Sebring disposal facility as a part of U.S. EPA's corrective action process. It does not appear that U.S. EPA or its contractors have the statutory authority to conduct an investigation under the "corrective action" provisions of the Hazardous and Solid Waste Amendments of 1984 to which you refer in your letter.

As you should be aware, ASF does not have treatment, storage or disposal facility permits under the Resource Conservation and Recovery Act of 1980 (RCRA) for the facilities

*Squire, Sanders & Dempsey*

Greg Kvaal, Project Environmental  
Engineer

February 15, 1989

Page 2

and is thus not subject to review under the RCRA program. Further, ASF is not seeking a permit under RCRA.

The statutory authority for corrective action in RCRA Section 3004(u), 42 U.S.C. § 6924(u), only applies to situations "at a treatment, storage, or disposal facility seeking a permit under this subchapter. . . ." [Emphasis supplied.] Since ASF is not "seeking a permit," that provision does not provide authority for an inspection. Further, the corrective action authority would only apply to circumstances where there are identified "releases of hazardous waste or constituents," and the Visual Site Inspection Agenda attached to your February 10, 1989 letter acknowledges that the "objective of this assessment is to determine whether releases of hazardous wastes or hazardous constituents have occurred or are occurring at the site. . . ." Neither Section 3004(u) nor the implementing regulations for RCRA corrective action provide an independent basis for requiring investigation and monitoring relating to non-RCRA units which are not known to involve "releases of hazardous waste or constituents."

The statutory limitations on the scope of the corrective action authority are also reflected in U.S. EPA's regulations. In the final rulemaking published at 50 Fed. Reg. 28746 (July 15, 1985), the regulations governing corrective action activities were promulgated in 40 C.F.R. Part 264 (at 40 C.F.R. §§ 264.100 and 264.101). Consistent with the express statutory scope, the regulations in Part 264 apply prospectively and only to facilities seeking (or required to seek) a final Part B RCRA permit. As noted in United Technologies Corp. v. U.S. EPA, 821 F.2d 714, 722 (D.C. Cir. 1987), "Section 3004(u), in essence, creates the broad duty to take corrective action as a quid pro quo to obtaining a permit." (Emphasis supplied.) Since ASF is not seeking and does not need such a permit, Part 264 (including §§ 264.100 and 264.101) is inapplicable to ASF. See 40 C.F.R. §§ 264.1 and 264.3.

You are also aware that ASF is now in litigation with U.S. EPA regarding the applicability of RCRA to the facilities that are the subject of your inspection request. For this reason, in addition to the lack of statutory authority, it would be inappropriate for the inspection to proceed covering many or all of the same facilities or topics that are now the subject of

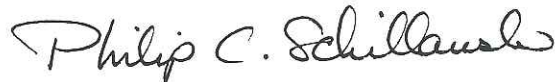
*Squire, Sanders & Dempsey*

Greg Kvaal, Project Environmental  
Engineer  
February 15, 1989  
Page 3

litigation. In addition, it would be inappropriate for U.S. EPA employees or agents to discuss with ASF personnel any matters relating to waste management at the facility since those issues may bear upon ongoing litigation. In any case, it would be inappropriate for U.S. EPA, its agents or contractors to have discussions arguably relating to any aspect of the pending litigation without having ASF counsel present.

If you have any further questions relating to this matter, please let me know.

Very truly yours,



Philip C. Schillawski

PCS:jas

cc: Kurt Weissmuller, U.S. Dept. of Justice  
Robert Swale, EPA Region V  
Chuck Ruud, ASF  
C.R. Dixon, Jr., ASF Alliance  
✓ Katherine McCord, EPA Region V  
Ed Kitchen, Ohio EPA  
Ann Anderson, A.T. Kearney, Inc.  
Edward J. Brosius, Esq.



A.T. Kearney, Inc.  
222 South Riverside Plaza  
Chicago, Illinois 60606  
312 648 0111  
Facsimile 312 648 1939-2302

Management  
Consultants

February 13, 1989

**ATKEARNEY**

Ms. Pat Vogtman  
Regional Project Officer  
U.S. Environmental Protection Agency  
Region V  
230 South Dearborn Street  
Chicago, Illinois 60604

Reference: EPA Contract No. 68-01-7374; Work Assignment  
No. R25-01-29; American Steel Foundry,  
Alliance, Ohio; EPA I.D. No. OHD017497587;  
Project Plan

Dear Ms. Vogtman:

Enclosed please find the proposed project plan which you requested for the above-referenced facility. This project plan calls for the Kearney Team to conduct a RCRA Facility Assessment (RFA) as you have requested.

All applicable A. T. Kearney Conflict of Interest Avoidance procedures have been adhered to for the proposed firms and staffs.

Also enclosed is a project plan approval sheet which you should sign and return to James Levin at Kearney/Centaur Division, 225 Reinekers Lane, 3rd Floor, Alexandria, VA 22314.

Please feel free to call me or William Rohrer, the Work Assignment Manager (who can be reached at 612/227-6500), if you have any questions.

Sincerely,

*Ann L. Anderson*

Ann L. Anderson  
Technical Director

Enclosure

cc: A. Pearce, EPA OSW	L. Axe
C. Miron, EPA Contracts	A. Williams
B. Swale, EPA Region V	M. Ritter
J. Levin	W. Rohrer, DPRA
D. Bean	D. LaRusso

2532E

EPA Contract No. 68-01-7374  
Work Assignment No. R25-01-29  
American Steel Foundry  
Alliance, Ohio  
EPA I.D. No. OHD017497587

February 13, 1989  
Revision 0

Regional Project Plan Approval

I have reviewed the attached project plan and find it meets our criteria for technical accuracy. The projected cost and hour estimates are also acceptable.

APPROVAL:

\_\_\_\_\_  
EPA Regional Project Officer

\_\_\_\_\_  
Date

CONCURRENCE:

\_\_\_\_\_  
A. T. Kearney Program Director

\_\_\_\_\_  
Date

cc: EPA Headquarters Project Officer

EPA Contract No. 68-01-7374  
Work Assignment No. R25-01-29  
American Steel Foundry  
Alliance, Ohio  
EPA I.D. No. OHD017497587

February 13, 1989  
Revision 0

## PROJECT PLAN

AMERICAN STEEL FOUNDRY  
ALLIANCE, OHIO

### RCRA FACILITY ASSESSMENT

- 1 -

#### WORK TO BE PERFORMED

The Kearney Team will conduct a RCRA Facility Assessment (RFA) of the American Steel Foundry facility (EPA I.D. No. OHD017497587).

#### PRIMARY INTENDED USE

The purpose of this project is to assist EPA Region V in:

- (1) Identifying and gathering information on releases at the facility;
- (2) Evaluating solid waste management units (SWMUs) and other areas of concern for release potential to all media, and evaluating regulated units, subject to Subpart F requirements for release potential to media other than groundwater;
- (3) Making preliminary determinations regarding releases of concern and the need for further actions and interim measures at the facility; and
- (4) Screening from further investigations, those SWMUs and other areas of concern that do not present a release potential.

#### PROJECT TASKS

The project will consist of the following tasks:

Task 01 - Prepare a project plan. This will include all preliminary contacts required for the preparation of the project plan.

EPA Contract No. 68-01-7374  
Work Assignment No. R25-01-29  
American Steel Foundry  
Alliance, Ohio  
EPA I.D. No. OHD017497587

February 13, 1989  
Revision 0

- 2 -

Task 02 - Conduct a Preliminary Review (PR) of the existing file material to identify the need for additional information, and to provide focus for activities to be conducted during the Visual Site Inspection (VSI) and (if necessary) the Sampling Visit (SV). This task also includes preparation of a summary of information needs and a proposed VSI agenda to be sent to the facility by EPA.

The file search for this facility was conducted at the northeast district office of Ohio Environmental Protection Agency under Work Assignment No. R25-01-36. At the request of the Region, no file search was conducted at the EPA Region V Offices.

Task 03 - Conduct the VSI. This task will include:

- (1) Verification of known SWMUs identified during the PR;
- (2) Identification of any new SWMUs and other areas of concern;
- (3) Reviewing site information with the facility representatives and collecting additional information to be used in determining what further actions are necessary (e.g., SV or RFI); and
- (4) Identifying possible future sampling locations.

All aspects of the VSI will be coordinated through appropriate EPA and state contacts.

Task 04 - Prepare a PR/VSI report including all information important to determining the presence or absence of past releases and the potential for continuing releases.

Task 98 - Perform quality control review of draft deliverables.

Task 99 - Provide management oversight for the project.

- 3 -

#### HEALTH AND SAFETY PLAN

In preparing for the site visit, the Kearney Team will complete a checklist for the site to identify the activities and potential hazards at the site. Information to complete the checklist will be obtained from the Regional Project Officer and/or other EPA staff who are knowledgeable about the site and from the facility contact.

After the checklist has been completed, a determination will be made regarding the need for a health and safety plan for the site visit based on the anticipated hazards at the site. In cases where a health and safety plan is required, the Kearney Team will develop a specific plan for the site and amend the project plan to include an additional task to provide for resources for plan development. In cases where no health and safety plan is required (i.e., minimal hazard potential), the Kearney Team will follow health and safety procedures as outlined in the Kearney Staff Protocol for site visits.

#### QUALITY CONTROL PLAN

The Kearney Team Work Assignment Manager will conduct milestone checks on each task. In addition, draft project deliverables will be reviewed by a senior technical staff member of Kearney/Centaur, Inc. to ensure technical quality and consistency with EPA regulations and policy.

#### STAFFING AND MANAGEMENT

William Rohrer of DPRA, Inc. will serve as the Work Assignment Manager (WAM).

Individual staff responsibilities are shown in Attachment I. The proposed staffing and task assignments for the project are shown in Attachment II.

Hour allocations are shown for each task.

All applicable Conflict of Interest Avoidance (COI) procedures have been adhered to for the proposed firms and staffs.

EPA Contract No. 68-01-7374  
Work Assignment No. R25-01-29  
American Steel Foundry  
Alliance, Ohio  
EPA I.D. No. OHD017497587

February 13, 1989  
Revision 0

- 4 -

#### COST ESTIMATE

The estimated cost for completing this project is included as Attachment IV.

#### PERFORMANCE EVALUATION CRITERIA

The measures for evaluation of work assignment performance are described for each of the following performance criteria: user satisfaction; technical quality; editorial quality; conformity to schedule; conformity to budget; and communication. Measures for each of these criteria are discussed and agreed upon by the RPO and the WAM during the assignment planning process. To the extent possible, clear, quantitative measures should be established.

EPA Contract No. 68-01-7374  
Work Assignment No. R25-01-29  
American Steel Foundry  
Alliance, Ohio  
EPA I.D. No. OHD017497587

February 13, 1989  
Revision 0

ATTACHMENT I

STAFF RESPONSIBILITY CHART

<u>STAFF</u>	<u>ROLE</u>	<u>AREAS OF RESPONSIBILITY</u>
A. Anderson	Technical Director	Management and oversight
W. Rohrer	Work Assignment Manager	Day-to-day management and oversight; PR/VSI Report
A. Anderson	Regional Liaison	Initiates work; monitors project planning and implementation; conducts project performance evaluation
L. Axe	Technical Staff	Final Technical Review
G. Kvaal	Technical Staff	Team Leader, VSI, PR/VSI Report
S. Heikkila	Technical Staff	VSI, PR/VSI Report
D. LaRusso	Quality Control	Critical Review
A. Williams	Technical Assistant	Administrative support

EPA Contract No. 68-01-7374  
 Work Assignment No. R25-01-29  
 American Steel Foundry  
 Alliance, Ohio  
 EPA I.D. No. OHD017497587

February 13, 1989  
 Revision 0

# ATTACHMENT II

STAFF			TASK							
Name	Firm	Labor Category	1/	2/	3/				4/	TOTAL
			01	02	03	04	98	99		
<u>Technical Director</u>										
A. Anderson	ATK	P4	4	-	-	-	-	8	12	
<u>Work Assignment Manager</u>										
W. Rohrer	DPRA	P4	2	-	-	-	-	12	14	
<u>Staffing</u>										
A. Anderson	ATK	P4	2	-	-	-	-	2	4	
L. Axe	ATK	P2	-	-	-	6	-	-	6	
A. Williams	ATK	T1	10	-	-	-	-	10	20	
Tech. Support	ATK		3	-	-	-	-	3	6	
G. Kvaal	DPRA	P2	-	16	12	180	-	-	208	
S. Heikkila	DPRA	P3	-	16	12	20	-	-	48	
Tech. Support	DPRA		-	2	-	20	-	-	22	
<u>Quality Control</u>										
D. LaRusso	K/C	P4	-	-	-	-	10	-	10	
TOTALS			21	34	24	226	10	35	350	

1/ ATK = A. T. Kearney, Inc.  
 K/C = Kearney Centaur  
 DPRA = DPRA, Inc.

2/ Labor Category (e.g., P4, P3)

3/ Task 98 - Quality Control

4/ Task 99 - Project Management



EPA Contract No. 68-01-7374  
Work Assignment No. R25-01-29  
American Steel Foundry  
Alliance, Ohio  
EPA I.D. No. OHD017497587

February 13, 1989  
Revision 0

### ATTACHMENT III

#### SCHEDULE

The project will be conducted according to the following schedule:

<u>Task</u>	<u>Mile- stones</u>	<u>Project Tasks</u>	<u>Milestone Dates</u>
01	01	Prepare project plan	02/10/89
02	02	Conduct preliminary review/prepare information needs letter	02/10/89
03	03	Conduct Visual Site Inspection	W/E 02/17/89
04	04	Submit PR/VSI report to WAM	03/09/89
04	05	Submit draft PR/VSI report to QC	03/10/89
04	06	Submit QC comments to WAM	03/15/89
04	07	Submit PR/VSI report to Kearney Technical Director	03/22/89
04	08	Submit PR/VSI report to EPA	03/27/89
99	09	WAM submits Performance Evaluation to Technical Director	TBS*
99	10	Project management	In accordance with above milestones

\* To be scheduled  
W/E = Week ending

EPA Contract No. 68-01-7374  
Work Assignment No. R25-01-29  
American Steel Foundry  
Alliance, Ohio  
EPA I.D. No. OHD017497587

February 13, 1989  
Revision 0

ATTACHMENT IV

ESTIMATED COSTS

<u>A. T. Kearney, Inc.</u>	<u>Hours</u>	<u>Cost</u>
Labor	58	\$ 2,161
Other Direct Costs		<u>875</u>
Subtotal		\$ 3,036
<u>DPRA, Inc.</u>		
Labor	292	\$11,557
Other Direct Costs		224
Travel		<u>728</u>
Subtotal		\$12,509
	SUBTOTAL	\$15,545
<u>A. T. Kearney, Inc.</u>		
Fee - 3% Base		\$ 466
4 3/4% Award		<u>738</u>
Subtotal		\$ 1,204
<u>TOTAL ESTIMATED COST</u>	<u>350</u>	<u>\$16,749</u>

2532E



February 10, 1989

Mr. Edward Brosius  
Senior Corporate Attorney  
American Steel Foundries  
1001 East Broadway  
Alliance, OH 44601

Dear Mr. Brosius:

Enclosed is the proposed Visual Site Inspection Agenda and Preliminary Information Needs List for the upcoming visual site inspection (VSI) for American Steel Foundries and Sebring Disposal Facility in Mahoning County, Ohio. Steven Heikkila and I plan to conduct the VSI February 16, 1989. We will arrive at the facility at 8:30 a.m.

Robert Swale, EPA Region V, requested that you contact him (312/689-6591) or his supervisor, Lisa Pierard (312/353-4789) to confirm receipt of this letter.

Sincerely,

A handwritten signature in cursive script that reads 'Greg Kvaal'.

Greg Kvaal  
Project Environmental Engineer

GK/vas  
enc

cc: Curt Weismueller, U.S. Dept. of Justice  
Robert Swale, EPA Region V  
Chuck Ruud, Alliance  
Katherine McCord, EPA Region V  
Ed Kitchen, Ohio EPA  
Ann Anderson, A. T. Kearney, Inc.  
DPRA file 5008.067

RCRA FACILITY ASSESSMENT  
VISUAL SITE INSPECTION AGENDA

FACILITY: American Steel Foundries and Sebring Disposal Facility, Mahoning County, Ohio

EPA ID NO: OHD981090418 and OHD017497587

FACILITY CONTACT: Edward Brosius

DATE OF INSPECTION: February 16, 1988

PERSONNEL: G. Kvaal, DPRA Incorporated  
S. Heikkila, DPRA Incorporated

PURPOSE OF THE VISUAL SITE INSPECTION

The Hazardous and Solid Waste Amendments of 1984 (HSWA) broaden the scope of EPA's authority under RCRA by requiring corrective action for releases of hazardous wastes and constituents at facilities that manage hazardous wastes. The first step in EPA's corrective action process is a RCRA Facility Assessment (RFA) to determine the potential for releases of hazardous constituents from all Solid Waste Management Units (SWMUs). The RFA includes a Preliminary Review (PR) of available file information about the facility, a Visual Site Inspection (VSI), and if necessary a Sampling Visit. The preliminary review (PR) has been completed for this facility and a visual site inspection (VSI) has been determined to be necessary.

The RFA requires identification and systematic review of all solid waste streams at the facilities. The objective of this assessment is to determine whether releases of hazardous wastes or hazardous constituents have occurred or are occurring at the site which require further investigation. This analysis will provide information to establish priorities for subsequent remedial investigations. An integral part of this assessment is a VSI of your facilities to verify the location of all Solid Waste Management Units (SWMUs) and to determine their condition by visual observation. During the VSI no samples will be taken. Facility personnel will be asked to provide assistance in reviewing solid waste flow and previous disposal practices. The VSI will provide the inspection team with a technical understanding of present and past waste flow and handling, treatment, storage and disposal practices. Photographs of each SWMU will be taken to document the condition of the units at the facility and the waste management practices used.

The purpose of the VSI is to:

1. Confirm, by visual inspection, information collected during the PR;
2. Survey the site for additional SWMUs and other areas of concern, and identify potential sample points for possible future sampling activities.
3. Review the site information with facility representatives and collect additional information to address the information needs identified during the PR. Photographs are to be taken of all units and areas of concern.

### INSPECTION ORGANIZATION

A two-member team will perform the Visual Site Inspection tour. The team, in general, will inspect the layout of production facilities and waste management and disposal areas, such as container storage areas, surface impoundments, landfills, and land treatment units. The team will also identify pathways for release of wastes to soil, air, and surface water bodies. An interview with the facility staff will be performed to develop a better understanding of past waste disposal practices. The team will concentrate on developing a better understanding of the waste generation, treatment, storage, and disposal facilities. A review of the regional hydrogeology and site-specific data will be performed to make an assessment of depth to groundwater and its flow direction in the proximity of the Solid Waste Management Units. Pertinent geologic information consisting of well logs, USGS topographic maps, plat and zoning maps, and surrounding land use patterns will also be reviewed.

The overall rationale of this inspection plan is to enable the team to trace waste streams from process through treatment and disposal. A preliminary list of potential SWMUs has been developed after a review of available file materials. Further investigation during the VSI may reveal additional SWMUs, or that some units are not SWMUs. Some adjustments to the agenda will more than likely be necessary to accommodate facility staff geographical location of units and/or operational constraints.

Preliminary information needs have been included in an attachment for American Steel Foundries in preparing for the site visit. These issues will be resolved in an introductory meeting during the VSI.

Following the meeting an inspection of all units identified will be conducted.

It is understood that the VSI will be conducted for both the foundry itself and the disposal facility that is located on non-contiguous property.

#### PROPOSED INSPECTION SCHEDULE

February 16, 8:30 AM	Introductory Meeting	<ul style="list-style-type: none"><li>• Purpose of Visit</li><li>• Discuss Information Needs and Preliminary Findings</li><li>• Revise Agenda as Needed</li></ul>
	Inspection Tour	<ul style="list-style-type: none"><li>• Inspect Solid Waste Management Units</li></ul>
	Close-Out Meeting	

#### PRELIMINARY SWMU LIST

1. Sebring Disposal Facility
2. Drum Storage Area
3. Mill Water Line
4. Sludge Storage Area
5. Used Oil Storage Units
6. Boiler Blowdown Sumps
7. Scrap Storage Areas
8. Past Treatment Operation
9. Baghouse Dust Storage Units
10. Wastewater Treatment System
11. Open Dumping Areas

PRELIMINARY ASSESSMENT NEEDS FOR  
RCRA FACILITY ASSESSMENT

American Steel Foundries and Sebring Disposal Facility  
Mahoning County, Ohio  
EPA I.D. Nos. OHD981090418 and OHD017497587

1. Provide information on release control systems for the Sebring Disposal Facility including the cover design, and leachate collection and treatment system.
2. Estimate of type, amount, and location of waste types disposed in Sebring Disposal Facility.
3. Provide a recent analysis of electric arc furnace baghouse dust.
4. Indicate the location of areas where open dumping or disposal of unapproved materials has occurred in the past.
5. Provide a plan view of facilities showing location and approximate dimensions of preliminary SWMUs.
6. Provide the composition and disposition of sludges generated at the facility.
7. Discuss any waste management activities that were carried out in the Past Treatment Operation (SWMU 8).
8. Provide maps which show the location process sewer and storm sewer lines.
9. Submit information relative to the history of the facility including:
  - a) date of organization and
  - b) former owners and manufacturing processes as well as wastes generated.
10. Provide a history of leaks, spills, or other uncontrolled releases at the facility and describe corrective action taken.
11. Provide the location of any waste accumulation, treatment, or disposal areas (historic or current) not identified in this letter. Include dimensions, capacity, dates of operation, materials of construction, release control mechanisms, and history of releases.
12. In addition, the inspection team will be asking for confirmation of period of operation, release history and release controls for all SWMUs identified.



State Of Ohio Environmental Protection Agency

P.O. Box 1049, 361 East Broad St., Columbus, Ohio 43216-1049  
(614) 466-8565

NO  
PERMIT  
WRITER



Richard F. Celeste, Governor

May 16, 1986

Mr. George Hamper, Chief  
Waste Management Division  
Technical Programs Section, Ohio Unit  
USEPA, Region V, 5HW-13  
230 South Dearborn Street  
Chicago, Illinois 60604

RECEIVED

MAY 19 1986

U.S. EPA, REGION V

Dear Mr. Hamper:

Attached for your further action is a Facility Management Plan for American Steel Foundry, OHDO17497587. The FMP recommends that a USEPA enforcement order be drafted. This is consistent with a prior referral to USEPA. Compliance with the order will result in the generation of additional useful data.

Please provide me with any comments you may develop concerning the quality or quantity of this work effort.

If your permit writers have a question of a specific nature please direct them to contact the Ohio EPA District Permit Writer. Any other questions or comments of a programmatic or scheduling issue should be directed to me.

We are on track with the development and scheduling of FMP's. If you have questions, please call.

Sincerely,

Tom E. Carlisle  
Acting Manager, Engineering Section  
Division of Solid & Hazardous Waste Management

TEC/ara

Attachments

cc: Martha Gibbons  
Rose Freeman, USEPA  
Dave Wertz/Dave Bergman, NEDO  
File (w/attachment)  
Ed Kitchen

1407U

RECEIVED  
MAY 19 1986  
SOLID WASTE BRANCH  
U.S. EPA, REGION V



Name of Preparer: M. BERGMAN  
 Date: APRIL 28, 1986

RECEIVED  
OHIO EPA

MAY 01 1986

Model Facility Management Plan

DIV. of SOLID & HAZ. WASTE MGT.

1. Facility Name: AMERICAN STEEL FOUNDRY

2. Facility I.D. Number: OHD-017-497-587

3. Owner and/or Operator: AMSTED INDUSTRIES INC.

4. Facility Location: GENERATING  
1001 E. BROADWAY  
 Street Address

OFF-SITE  
DISPOSAL  
FACILITY } LAKE PARK RD.  
SEBRING, OHIO  
MAHONING COUNTY

ALLIANCE STARK OHIO 44601  
 City County State Zip Code

5. Facility Telephone (if available): (216) 832-6150

6. Interim Status and/or Permitted Hazardous Waste Units and Capacities of Each Unit:

<u>Type of Units</u>	<u>Size or Capacity</u>	<u>Active or Closed</u>
<input type="checkbox"/> Storage in Tanks or Containers		
<input type="checkbox"/> Incinerator		
<input checked="" type="checkbox"/> Landfill (OFF-SITE)	12.485 ACRES	ACTIVE (NOT PERMITTED)
<input type="checkbox"/> Surface Impoundment		
<input type="checkbox"/> Waste Pile		
<input type="checkbox"/> Land Treatment		
<input type="checkbox"/> Injection Wells		
<input type="checkbox"/> Others (Specify)		

7. Permit Application Status: \_\_\_\_\_ (HWDMS action item number)

8. Identification of Hazardous Waste Generated, Treated, Stored or Disposed at the Facility: (may attach Part A or permit list or reference those documents if listing of wastes is exceptionally long - in that case, to complete this question list wastes of greatest interest and/or quantity and note that additional wastes are managed)

<u>Type of Waste</u>	<u>Quantity</u>	<u>Generated, Treated, Stored or Disposed</u> (note appropriate categories)
Electric Arc Furnace Dust	624 YDS/YR	Generated/Treated/Disposed

9. Review of Response to Solid Waste Management Questionnaire indicates: (check one) *Certification statement*

N/A Solid Waste Management Units exist (other than previously identified RCRA units)

N/A No Solid Waste Management Units exist (other than previously identified RCRA units)

N/A It is unclear from review of questionnaire whether or not any solid Waste Management Units exist

N/A Respondent indicates that does not know if any Solid Waste Management Units exist

10. If the response to question 9 is that Solid Waste Management Units exist, than check one of the following:

N/A Releases of hazardous waste or constituents have occurred or are thought to have occurred

N/A Releases of hazardous waste or constituents have not occurred

N/A Releases of hazardous waste or constituents have occurred or are thought to have occurred but have been adequately remedied

N/A It is not known whether a release of hazardous waste or constituents has occurred

11. The facility is on the National Priorities List or proposed update of the List or ERRIS list

\_\_\_\_\_ Yes - indicate List or update

\_\_\_\_\_ No

X Yes - ERRIS list

Prior to completion of the Recommendation portion of the Facility Management Plan, the attached Appendix must be completed.

12. Recommendation for Regional Approach to the Facility: Check one

\_\_\_\_\_ Further Investigation to Evaluate Facility

\_\_\_\_\_ Permit Compliance Schedule

\_\_\_\_\_ Corrective Action Order (may include compliance schedule)

X Other Administrative Enforcement

\_\_\_\_\_ Federal Judicial Enforcement

\_\_\_\_\_ Referral to CERCLA for Federally Financed or Enforcement Activity

\_\_\_\_\_ Voluntary/Negotiated Action

\_\_\_\_\_ State Action

Brief narrative in explanation of selection: Require facility to comply with the Hazardous Waste and Solid Waste Regulations and submit a compliance schedule.

a) If further investigation alternative is selected:

\_\_\_\_\_ Site inspection - anticipated inspection date \_\_\_\_\_

State or Federal inspection \_\_\_\_\_

\_\_\_\_\_ Preliminary Assessment - anticipated completion date \_\_\_\_\_

\_\_\_\_\_ RI/FS - anticipated date of initiation \_\_\_\_\_

State/Federal \_\_\_\_\_

Private Party \_\_\_\_\_ identify party(ies)

## b) If Permit Alternative is Selected: Projected Schedule

Date of Part B Submission: \_\_\_\_\_

Date of Completeness Check: \_\_\_\_\_

Date for Additional Submissions (if required): \_\_\_\_\_

Date of Completion of Technical Review: \_\_\_\_\_

Completion of Draft Permit/Permit Denial: \_\_\_\_\_

Public Notice for Permit Decision: \_\_\_\_\_

Date of Hearing (if appropriate): \_\_\_\_\_

Date for Final Permit or Denial Issuance: \_\_\_\_\_

Description of any corrective action provisions to be included in permit -

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## c) If Corrective Action Order Alternative is Selected:

Estimated Date for Order Issuance: \_\_\_\_\_

Description of Provisions of the Order to be Completed by

Facility: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Description of Compliance Schedule to be Contained in Order:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## d) If Other Administrative Enforcement Action is Selected:

Project Date for Issuance of the Order: June 30, 1986

Description of Provisions or Goals of the Order:

1) cease disposal & treatment of EAF Dust within 30 days2) Establish a generator compliance program within 30 days3) Comply with pertinent interim status standards within ? days

\_\_\_\_\_

\_\_\_\_\_

e) If Judicial Enforcement Alternative Selected:

Date of Referral to Office of Regional Counsel: \_\_\_\_\_

f) If Referral to CERCLA for Action Selected:

Date of Referral to CERCLA Sections: \_\_\_\_\_

g) If Voluntary/Negotiated Action Alternative if Selected:

Date of Initial Contact with Facility: \_\_\_\_\_

Description of Goals of Contact or Discussions with  
Facility: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Date for Termination of Discussions if Not Successful:

\_\_\_\_\_

Date of Finalization of Settlement if Negotiation Successful:

\_\_\_\_\_

h) If State Action Alternative is Selected:

Date for Referral to State: \_\_\_\_\_

Name of State Contact: \_\_\_\_\_

Phone: \_\_\_\_\_

## APPENDIX

The questions constituting this Appendix to the Facility Management Plan must be filled out prior to completion of recommendation elements of the Plan. The purpose of this appendix is to provide a summary documentation of the State and/or U.S.EPA review of available information on the subject facility. The intent is that a comprehensive file review will be conducted as the basis for selection of the recommended approach to a given facility. If the Appendix is completed by State personnel questions referring to available data reference information in State files; for Federal personnel the reference is to Federal files. Where questions refer to "all" available data or information and such material is voluminous, the response should indicate that files are voluminous, and then reference most telling information, for example groundwater contaminants found frequently or at extremely high concentrations should be specifically listed, and information most directly supporting recommended approach to facility should be described. If no information is available in facility files, the response should so indicate. It is also anticipated that this Appendix may be updated periodically as more information becomes available.

### 1. Description of All Available Monitoring Data for Facility:

<u>Type of Data</u>	<u>Date</u>	<u>Author</u>	<u>Summary of Results or Conclusions</u>
Assessment of ASF Disposal Site	Feb. 14, 1986	Bowser-Morner Associates	They conclude that all waste streams are non-hazardous
Electric Arc Furnace Dust Sample	Feb. 12, 1985	Catherine McCord Ohio EPA	This waste material exceeded the E.P. Toxicity standards for cadmium.

### 2. Description of Enforcement Status:

<u>Type of Action</u>	<u>Date</u>	<u>Local, State or Federal</u>	<u>Result or Status</u>
NONE			

3. Description of Any Complaints from Public:

Source of Complaint   Date   Recipient   Subject and Response

NONE KNOWN

4. Description of All Inspection Reports for Facility:

Date of Inspection   Inspector (Local, State, Federal)   Conclusions or Comments

April 26, 1985	C. McCord, Ohio EPA	} Copies of letters enclosed
Nov. 19, 1984	C. McCord, Ohio EPA	

5. During inspection of this facility did the inspector note any evidence of past disposal practices not currently regulated under RCRA such as piles of waste or rubbish, injection wells, ponds or surface impoundments that might contain waste or active or inactive landfills?

X Yes - give date if inspection and describe observation

NOV. 19, 1984, and APRIL 26, 1985, facility continued to dispose of hazardous waste at an off-site unlicensed strip pit.

           No

           Don't know

6. Do inspection reports indicate observations of discolored soils or dead vegetation that might be caused by a spill, discharge or disposal of hazardous wastes or constituents?

☒ Yes - indicate date of report and describe observations

APRIL 26, 1985, photographs taken show

wastes that were dumped into impounded  
strip pit.

☐ No

☐ Don't know

7. Do inspection reports indicate the presence of any tanks at the facility which are located below grade and could possibly leak without being noticed by visual observation?

☐ Yes - date of inspection and describe information in report

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

☒ No

☐ Don't know

8. Does a groundwater monitoring system exist at the facility? YES

9. If answer to question 8 is yes, is the groundwater system capable of monitoring both regulated RCRA units and other Solid Waste Management Units? UNKNOWN

Explain - This groundwater monitoring system  
is not a formal RCRA monitoring  
unit, so it's capabilities are questionable.

10. Is the groundwater monitoring system in compliance with applicable RCRA groundwater monitoring standards? NO

If no, explain deficiency Do not have an

unaffected upgradient well and are  
not on a RCRA testing schedule.



11. Describe all information on facility subsurface geology or hydrogeology available.

<u>Type of Information</u>	<u>Author</u>	<u>Date</u>	<u>Summary of Conclusions</u>
Assessment of ASF Disposal Site	Bower-Moner associates	Feb. 14, 1986	They conclude that the groundwater quality is mainly impacted from the adjacent town dump which has been closed for years.

12. Did the facility submit a 103(c) notification pursuant to CERCLA?

       Yes      Date of Notification \_\_\_\_\_  
X No (NONE IN FILE)

13. If answer to 12 is yes, briefly summarize content of that notification.  
(waste management units identified, type of waste concerned)

14. Has a CERCLA Preliminary Assessment/Site Investigation (PA/SI) been completed for this facility?

    X     Yes  
           No

15. If answer to question 14 is yes, briefly describe conclusions of the PA/SI focusing on types of environmental contamination found, wastes and sources of contamination, HRS Site.

Copy of report is inclosed

16. If available, having reviewed the CERCLA notification, RCRA Part A and RCRA Part B, it appears that: (CERCLA unit refers to unit or area of concern in CERCLA response activity)

N/A RCRA and CERCLA units are same at this facility

N/A RCRA and CERCLA units are clearly different units

N/A There is an overlap between the RCRA and CERCLA units  
(some are the same, some are different)

Does RCRA unit  
include SWMU?

(There are no RCRA units)

17. Description of Any Past Releases or Environmental Contamination:

<u>Type/Source of Release</u>	<u>Date</u>	<u>Material Released</u>	<u>Quantity</u>	<u>Response</u>
-------------------------------	-------------	--------------------------	-----------------	-----------------

Continuous dumping of solid and hazardous wastes at this location. Wastes are dumped directly into a strip pit filled with water.

18. Identification of Reports or Documentation Concerning Each Release Described in Item 17.

<u>Title/Type of Report</u>	<u>Date</u>	<u>Author</u>	<u>Recipients</u>	<u>Contents</u>
Nov. 19, 1984 Inspection Report		C. McLeod	Ohio EPA	} COPIES OF LETTERS ENCLOSED
April 26, 1985 Inspection Report		C. McLeod	Ohio EPA	

19. Highlight any information gaps in the file - describe any plans to obtain additional needed information.

NONE KNOWN

20. Summary of major environmental problems noted, desired solution and possible approaches.

<u>Problem</u>	<u>Solution</u>	<u>Approach</u>	<u>Pros and Cons</u>
Dumping of solid and hazardous wastes in an unpermitted land disposal unit	Cease disposal of all solid and hazardous wastes at this site until the unit is permitted for such disposal.	Compliance orders and a fine	Company will probably not comply without major resistance

Ohio EPA

Re: American Steel Foundries  
Stark County  
OHD No. (to be applied for)  
G-T

Mahoning County  
OHD 017 497 587  
TSD

Mr. C.R. Dixon, Jr.  
American Steel Foundries  
1001 East Broadway  
Alliance, Ohio 44601

CERTIFIED MAIL

7-9-85

Dear Mr. Dixon:

I would like to thank you and Mr. John DiFoure for your cooperation during my announced inspection of your facility and disposal site on April 26, 1985. I was accompanied on this inspection by William Skowronski, also of the Ohio Environmental Protection Agency's (OEPA) Northeast District Office. The purpose of this inspection was to evaluate your facilities compliance with Federal and State hazardous waste regulations. This letter will summarize the findings of my inspection. Completed inspection forms for both your facility and disposal site are also enclosed.

On November 19, 1984, I conducted an initial inspection of your facilities to verify American Steel Foundries' (ASF) request for withdrawal of a Federal Part A - Treatment, Storage, and Disposal (TSD) permit. The Part A permit was for the disposal of 12.485 acre-feet of D006 waste in your company-owned strip mine cut in Mahoning County. Approximately 800 tons per year of the cadmium waste (D006) was to be disposed of at the site. This disposal site was assigned the following EPA identification number: OHD 017 497 587. A request for withdrawal of this Federal permit was made on June 25, 1982. The withdrawal letter states that based on "further testing of the waste streams has shown that this facility has not and does not now treat, store or dispose of any hazardous wastes as defined by EPA". A permit application was never filed with the Ohio EPA.

The results of Ohio EPA's analyses of samples taken on February 12, 1985 indicate that at least one waste stream is a hazardous waste. The sample results indicates that the electric arc furnace dust is a hazardous waste because EP Toxicity maximum concentration limits (1.0 mg/l) are exceeded for cadmium. The waste had a cadmium level of 1.5 mg/l. The samples taken at the same time by ASF were not run under the proper analytical methods for an EP Toxicity analysis. Several requests for copies of past ASF waste analysis have been made by Ohio EPA. No additional or past analyses of wastes have been submitted to Ohio EPA.

The electric arc furnace dust is collected in a baghouse and it is then transferred to a roll-off container. The point of waste generation is when the waste is transferred from the baghouse to the roll-off container. Prior to the arc furnace dust being placed in the roll-off, the container is partially filled with slurry generated by your water treatment system. This water treatment system accepts wastewater from ASF's sand washer unit and air pollution scrubber units. The exact amount of electric arc furnace dust (a hazardous waste) versus the amount of slurry placed in roll-off container varies with each shipment. No active mixing of the two wastes is done. It may be possible that the characteristic hazardous waste may be diluted to the point that the metal levels are below the EP toxicity limits, but this situation has never been demonstrated by ASF. No analysis of the combined wastes has been presented to Ohio EPA. The lack of control over this mixing/dilution process does not indicate that controlled treatment procedures are being followed. ASF has communicated to Ohio EPA the slurry and electric arc furnace dust waste streams are combined for dust control measures for the transport and disposal of the electric arc furnace dust. Based on these facts, it can only be assumed that all of the loads, some of the loads, or unmixed portions of the loads of waste is still EP toxic and is still is a hazardous waste.

Your slag is considered an exempt material and its disposal is not currently regulated in Ohio. All other waste streams must be handled as solid or hazardous wastes, as required by State and Federal law. All solid wastes are required to go to licensed landfill and all hazardous waste is required to be transported to a permitted hazardous waste treatment, storage, and disposal (TSD) facility.

Based on the facts presented in the previous paragraphs, the evaluation of ASF's compliance with hazardous waste regulations has been completed in the framework of the foundry being a generator, doing unpermitted treatment, and the disposal site as being an unpermitted TSD facility.

The remainder of this letter will outline inquiries and deficiencies related to your hazardous waste management practices. These comments will be categorized into two groups, the first for your production facility and the second for your disposal site.

#### PRODUCTION FACILITY

Your facility is located at 1001 East Broadway in the City of Alliance, Stark County. As previously stated, all process waste is disposed of off-site at the company-owned disposal site. Some of your facility's waste streams have been tested by Ohio EPA and at least one waste (electric arc furnace dust) is a hazardous waste because of heavy metal content. This dust is combined with a slurry from your sand washer unit, prior to dumping at the disposal site with the other industrial wastes.

Because at least one of your waste streams is considered as a hazardous waste, your facility is classified as a hazardous waste generator and transporter. As outlined in both Federal and State regulations, the definition of generator is "any person, by site whose act or process produces hazardous waste identified or listed" in the regulations. As a generator and transporter of hazardous waste, your facility is obliged to comply with certain Federal and State regulations. ASF is permitted to store hazardous waste at the facility for ninety days prior to its removal off-site to a permitted TSD, if certain requirements are fulfilled. The remainder of this section will outline the general areas of your facility's violation of hazardous waste generator requirements.

1. Wastes generated at your facility are required to be tested or are acknowledged to be hazardous wastes as defined in 40 CFR 261 (40 CFR 262.11/3745-52-11 (D) ).

Some of your waste streams have been sampled by Ohio EPA and your company. The correct analytical procedures were not followed in your company's EP toxicity analysis and additional testing is required.

2. A generator must obtain an EPA identification number (40 CFR 262.12).

Your facility must apply to the U.S. EPA - Region V for an EPA identification number. The identification number assigned to your disposal site (OHD 017-497-587) can not be used for your generating facility. A notification package is enclosed and should be completed and forwarded to U.S. EPA and they will assign your facility a 10-digit identification number.

3. As outlined in 40 CFR 260.10, the definition of hazardous waste treatment is "any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste so as to neutralize such waste, or so as to recover energy or material resources from the waste, or so as to render such waste non-hazardous, or less hazardous; safer to transport, store or dispose of; or amenable for recovery, amenable for storage, or reduced in volume. A permit is required for any of the above activities.

The combining of the characteristically hazardous electric arc furnace dust is considered treatment and must cease immediately.

4. A generator who transports, or offers for transportation, hazardous waste for off-site treatment, storage, or disposal must prepare a hazardous waste manifest. This manifest must designate one facility which is permitted to handle the waste described in the manifest and include information such as identification number, total quantity of waste, transporter, and waste description (40 CFR 262.20 - 262.21/OAC 3745-52-20 - 3745-52-21).

No manifests are being used.

5. Prior to the offering hazardous wastes for transport off-site, the waste material must be packaged, labelled and marked in accord with applicable DOT regulations (40 CFR 262.30 - 262.32/OAC 3745-52-30 - OAC 3745-52-32).

No labelling or placarding of hazardous waste is currently being done.

6. A generator is required to provide a Personnel Training Program in compliance with Section 265.16 (a)(b)(c) (OAC 3745-52-34 (A)(4) ), which includes instruction in safe equipment operation and emergency response procedures, training new employees within 6 months and providing annual training refresher course (40 CFR 262.34/OAC 3745-52-34 (A)(4) ).

No training related to hazardous waste is being provided.

7. A generator must keep all records required by Section 265.16 (d)(e) (OAC 3745-65-16 (D)(E) ) including written job titles, job descriptions and documented employee training records as related to your hazardous waste management program.

No records related to a hazardous waste management program are maintained.

8. All required safety, fire, and communication equipment must be tested and maintained; testing and maintenance must be documented (40 CFR 265.33/OAC 3745-65-34).
9. Appropriate arrangements with local emergency service authorities must be made to familiarize them with possible hazards and the facility layout (40 CFR 265.37 (a)/OAC 3745-65-37 (A) ).
10. A written Contingency Plan must be developed and maintained, which is designed to minimize hazards from fire, explosions, or unplanned releases of hazardous wastes (40 CFR 265.51/OAC 3745-65-52 (A)(B)(C)(D)(E) ).

No Contingency Plan has been developed. This document must be maintained on-site and be submitted to all local and state emergency service authorities that might be required to participate in the execution of a plan. The plan is to be revised in response to facility, equipment, and personnel changes or failure of the plan.

11. An emergency coordinator must be designated at all times (on-site or on-call). This person must be familiar with all aspects of site operation and emergency procedures and have authority to implement all aspects of the Contingency Plan (40 CFR 265.56/OAC 3745-65-55).

During the inspection, it was observed that a degreasing agent was being used to clean large parts outside a building in a non-paved area. Please submit a Material Safety Data Sheet or equivalent for the degreasing agent. This information will be used to determine if a hazardous waste is generated by this degreasing operation.

#### DISPOSAL SITE (OHD 017-497-587)

The disposal site is located at Lake Park Boulevard and Heacock Road in Sebring Township, Mahoning County. The property was purchased in 1966 for the purpose of disposing all of ASF's production waste and has been in use since 1967. This site was formerly a coal strip mine and later a clay mine. The wastes disposed of at this site minimally includes: slag, foundry sands, electric arc furnace emission control dust from baghouses, a combined slurry resulting from a foundry sand washer unit and emission control devices, driveway sweepings, dust from work area dust recovery units, and refractory brick. Ohio EPA analysis indicates that the electric arc furnace dust is a hazardous waste. ASF has not submitted any data to refute this information. Attempts have been made to exclude other parties from dumping additional wastes at the site, but some dumping occurs periodically.

It has not been demonstrated that the treated (diluted) EP toxic electric arc furnace dust has been rendered non-hazardous prior to its disposal, so it is assumed that the waste material is still a hazardous waste. As stated in our letter dated April

19, 1985, the disposal site may not accept any hazardous waste or solid waste until the proper permits have been acquired. A State and Federal Hazardous Waste Permit is required for hazardous waste disposal, and a State Permit to Install and a Solid Waste License are required for solid waste disposal. If the Part A permit for the disposal site had not been withdrawn by ASF for the disposal site, the site could have operated under Interim Status but certain requirements would apply. These requirements include: ground water analysis, manifests and recordkeeping, a waste analysis plan, a contingency plan, financial assurance, closure and post-closure, and an operating record. A summary of TSD requirements which are currently not being complied with for this site are attached to the accompanying inspection form.

Please address the violations and inquiries related to your production and disposal facilities, in writing, within 30 days of the date of this letter. Feel free to contact me if you have any questions.

Sincerely,

*Catherine A. McCord*

Catherine A. McCord  
Environmental Scientist  
Division of Solid and Hazardous Waste Management  
Northeast District Office

CAM:kr

Enclosure

cc: Kevin O'Grady, DSHWM, Central Office  
Ed Kitchen, DSHWM, Central Office  
Joe Speakman, DSHWM, Central Office  
Ben Pfefferle, Legal, Central Office  
Steve Uecke, Mahoning County Health Department  
Joe Dopler, Stark County Health Department  
ASF, Solid Waste File  
Ken Frase, DWQMA, Northeast District Office



This is a list of violations of hazardous waste TSD regulations for American Steel Foundries disposal site. As stated in the accompanying letter, this disposal site does not have the required state and federal hazardous waste permits. The following violations relate to a permitted facility.

(1) An operator is required to have a detailed chemical and physical analysis of waste material, which contains all of the information which must be known to properly treat or store the waste (40 CFR 265.13(a) / OAC 3745-65-13(A)(1)).

The only company analysis presented to Ohio EPA is invalid because improper testing procedures were used in the EP toxicity analysis. A distilled water extraction was used, rather than an acid extraction. No other data has been submitted by ASF, even though several requests have been made.

(2) A written waste analysis plan is required which describes analytical parameters, test methods, sampling methods, testing frequency, and responses to any process changes that may affect the character of the waste (40 CFR 265.13(b) / OAC 3745-65-13(B)).

A waste analysis plan has not been developed.

(3) The facility is required to have a 24-hour surveillance system or an artificial or natural barrier and a means to control entry at all times (40 CFR 265.14(b)(2) / OAC 3745-65-14(B)(2)(a and b)).

Some fencing and natural barrier are in place, but they do not prevent access and open dumping at the site.

(4) The facility is required to have the sign "Danger-Unauthorized Personnel Keep Out" at each entrance of the active portion of the facility and other locations as deemed necessary (40 CFR 265.14(c) / OAC 3745-65-14(C)).

The required signs are not posted.

(5) The operator must develop and follow a comprehensive, written inspection plan. Documentation is required for the inspections, malfunctions, any remedial actions taken in an operating record log which is kept for at least three years (40 CFR 265.15 / OAC 3745-65-15).

An inspection plan has not been developed.

(6) Areas subject to spills are required to be inspected daily when in use and according to other applicable regulations when not actively in use (40 CFR 265.15(b)(4) / OAC 3745-65-15(B)(4).

No spill inspections are being performed.

(7) The facility is required to provide a Personnel Training Program, which includes instruction in safe equipment operation and emergency response procedures, training new employees with 6 months and providing annual training refresher course (40 CFR 265.16 / OAC 3745-65-16(A)(B)(C) ).

No training related to hazardous waste is being provided.

(8) The facility must keep all records required by Section 265.16(d)(e) [OAC 3745-65-16(D)(E)] including written job titles, job descriptions and documented employee training records as related to your hazardous waste management program.

No records related to a hazardous waste management program are maintained.

(9) The following safety, fire, and communications equipment is required: internal alarm system; access to telephone, radio, or other devices to summon emergency assistance; portable fire control equipment; water of adequate volume and pressure via hoses, sprinkler, foamers, or sprayers. This equipment is required to be tested along with documentation of such testing (40 CFR 265.32 - 265.33 / OAC 3745-64-32 and 33).

(10) Appropriate arrangements must be made with local emergency service authorities to familiarize them with the facility's possible hazards and layout (40 CFR 265.37(a) / OAC 3745-65-37(A) ).

No arrangements with local emergency authorities have been made.

(11) A written Contingency Plan must be developed and maintained, which is designed to minimize hazards from fire, explosions, or unplanned releases of hazardous wastes (40 CFR 265.51 / OAC 3745-65-52 (A)(B)(C)(D)(E) ).

No Contingency Plan has been developed. This document must be maintained on-site and be submitted to all local and state emergency service authorities that might be required to participate in the execution of a plan. The plan is to be revised in response to facility, equipment, and personnel changes or failure of the plan.

(12) An emergency coordinator must be designated at all times (on-site or on-call). This person must be familiar with all aspects of site operation and emergency procedures and have authority to implement all aspects of the Contingency Plan (40 CFR 265.56 / OAC 2745-65-55).

A hazardous waste emergency coordinator has not been designated.

(13) An operator must maintain a written operating record at the facility (40 CFR 265.73 / OAC 3745-65-73(A)).

An operating record is not maintained.

(14) An annual TSD Operating Report is required to be submitted by March 1 of every year (40 CFR 265.75 / OAC 3745-65-75).

An annual report has never been submitted.

(15) A facility that has accepted any unmanifested hazardous wastes from off-site sources for treatment, storage, or disposal must submit an unmanifested waste report to the Regional Administrator/Director within 15 days (40 CFR 265.76 / OAC 3745-65-76(A)).

None of the wastes received at the site has been manifested and no unmanifested waste reports have been submitted.

(16) The owner/operator of a landfill must implement a groundwater monitoring program capable of determining the facility's impact on the quality of the groundwater in the uppermost aquifer underlying the facility (40 CFR 265.90 / OAC 3745-65-90).

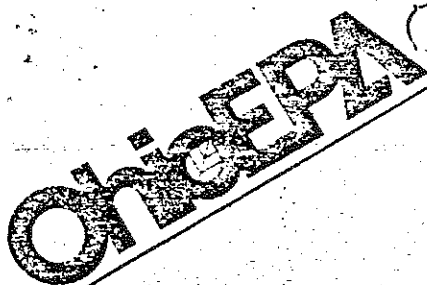
A groundwater monitoring program will soon be initiated as part of a remedial investigation / site characterization study.

(17) A written Closure Plan is required to be maintained and submitted to the Regional Administrator / Director (40 CFR 265.112 / OAC 3745-66-12).

A Closure Plan has not been developed.

(18) A owner / operator is required to establish financial assurance for closure of the facility (40 CFR 265.143 / OAC 3745-66-43).

No financial assurances for closure have been established.



Re: American Steel Foundries  
Stark County  
OHD 017-497-587  
Generator

Mr. Richard Dixon  
American Steel Foundries  
1001 E. Broadway  
Alliance, Ohio 44601

December 19, 1984

Dear Mr. Dixon:

I would like to thank you for meeting with me on November 19, 1984, during the hazardous waste inspection of American Steel Foundries. I would also like to extend my gratitude to Messrs. John Difloure and Dave Statler for also meeting with me and for providing a tour of your facility.

As I explained in our meeting, the U.S. Environmental Protection Agency (EPA) requested that Ohio EPA perform an inspection on your company as a hazardous waste treatment, storage, and/or disposal (TSD) facility and as a generator of hazardous wastes. The purpose of the inspection was to verify American Steel Foundries' request for withdrawal of your Part-A TSD Permit. I have enclosed a copy of this withdrawal request that was obtained from your parent company, Amsted Industries.

It is my understanding that wastes generated at your facility consists of wastewaters that are discharged to the municipal sewage treatment plant, solid wastes that are disposed of at a licensed sanitary landfill, and industrial by-products that are being disposed of at a company-owned disposal site. This site consists of strip mine cut, which is located at Lake Park Boulevard and Edwinton Avenue in Mahoning County. The industrial by-products that are disposed of at this site include:

- slag
- \*foundry sands
- \*electric furnace emission control dust
- cereal and gentonite binders
- \*sand washer sludge
- bricks
- driveway sweepings.

The foundry sands, electric furnace emission control dust, and the sand / washer sludge are regulated as a hazardous waste, if they exhibit certain physical or chemical characteristics. In order to verify that American Steel Foundries Part A withdrawal, I request that an extraction procedure (EP Toxicity analysis) be performed for all three of the above-mentioned items. I would like to take samples at the same time you do (split samples). The purpose of this analysis is to verify that the levels of EP Toxicity metals do not exceed maximum allowable concentrations.

December 19, 1984

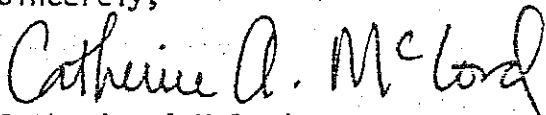
The procedures for EP Toxicity analysis are outlined in 40 Code of Federal Regulations (CFR, Part 261, Appendix II.).

There are also some additional testing requirements for foundry sand leachate. See the attached Ohio EPA policy statement for more information. It would be desirable to fulfill these testing requirements at the same time as the EP Toxicity analysis.

I request that you contact me before December 31, 1984 to set up a date for the split sampling of your waste. Mr. William Skowronski, the Unit Supervisor for the Division of Solid & Hazardous Waste Management in the Northeast District Office, will be accompanying me for our meeting. In addition to the sampling, we would like to discuss, in more detail, the disposal activities of your Mahoning County site with regard to Ohio EPA's Solid Waste regulations.

I will be looking forward to hearing from you. Please do not hesitate to contact me at (216) 425-9171 if I can be of any assistance.

Sincerely,



Catherine A. McCord  
Environmental Scientist  
Division of Solid & Hazardous Waste Management  
Northeast District Office

CAM:kr

cc: William Skowronski, Division of Solid & Hazardous Waste Management,  
Northeast District Office  
Paula Cotter, OEPA, Division of Solid & Hazardous Waste Management,  
Central Office

POTENTIAL HAZARDOUS WASTE SITE  
PRELIMINARY ASSESSMENT

AMERICAN STEEL FOUNDRIES DISPOSAL SITE  
CORNER EDWINTON AVENUE & LAKE PARK BLVD.  
SMITH TOWNSHIP, SEBRING, OHIO 44672

OHD 017 497 587

ADD TO CERCLIS

The Disposal Site for American Steel Foundries is a strip mine cut southeast of Sebring, in Mahoning County. The Village of Sebring has two neighboring municipal landfill areas, separated from the site by Edwinton and Heacock roads (Sources 1 & 4). A mobile home park is adjacent to the disposal site on the east side and residential areas exist to the north. Land use south of the site is generally rural-residential and sparsely populated. The Stark County line is approximately 2 + 1/2 miles east.

American Steel Foundries (ASF) acquired the property in 1966 and uses the excavated portions to dispose of plant wastes, which include: slag, foundry sands, electric furnace emission control dust, wastewater clarifier sludges, sandwasher sludge with bentonite binders, and driveway sweepings. The company submitted a RCRA Hazardous Waste Notification and Part A Permit Application (Sources 2 & 3) for the disposal site and indicated their waste was E.P. Toxic for cadmium (D006). In 1982, ASF requested a withdrawal of the Part A application in a letter to U.S. EPA (Source 5).

OEPA conducted an inspection at ASF to verify the condition of the site and the reasons for the withdrawal request in November 1984 (Source 10). E.P. Toxicity analyses was performed on the ASF wastes and the results indicated the electric furnace dust was hazardous for Cadmium (D006), (Source 11).

Hazards considered on this P.A. relate to the potential contamination from the land disposal of wastes containing cadmium. Ground water resources in the area exist in sandstones that could supply between 10 to 25 gpm of water (Source 6), sufficient for domestic and farm use. Private wells exist in the outlying areas not provided with municipal water from either Sebring or Alliance (Source 8). These two cities rely mainly on surface water intakes for their supplies, however, these are located either upstream or greater than 2 miles downstream from the disposal site. Alliance does have some back-up wells, according to the Public Water Supply file at NEDO. Direct contact and soil contamination are of concern due to the possibility of cadmium accumulating on clayey soils and the apparent lack of restricted access to the site.

Currently, U.S. EPA and OEPA are pursuing corrective action under the RCRA regulations for ASF's disposal site. ASF has contracted with a consultant to assess the condition of soils, ground, and surface water and cover material needed for eventual capping.

We recommend a medium priority for continued state activities;  
a low priority for FIT due to U.S. EPA involvement at American  
Steel Foundries disposal site.

Submitted by: Pam Quinn, DSHWM, NEDO

Reviewed by: Gary Gifford, DSHWM, NEDO

November 20, 1985

PQ:GG:kr